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ECONOMIC AND POLICY IMPLICATIONS OF PROPOSED ARMS SALES OR TRANSFERS TO THE PERSIAN GULF

by

James Riley Gilbert II

December 1988

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Economic and Policy Implications of Proposed Arms Sales or Transfers to the Persian Gulf

by

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Lieutenant Commander, United States Navy
B.A.A., North Texas University, 1975

Submitted in partial fulfillment of the requirements for dual degrees in

MASTER OF SCIENCE IN MANAGEMENT

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ABSTRACT

Presidents Carter and Reagan each established a new United States policy to govern sales or transfers of conventional arms to foreign nations. President Carter called for stricter controls and an overall reduction in arms transfers to foreign nations. President Reagan believed that arms transfers to friends and allies strengthened the United States position in the world. This thesis analyzes the success of both arms transfer policies in the Persian Gulf by comparing the dollar amount and type of equipment actually transferred against the formal Congressional Notifications (Arms Export Control Act section 36b). Further it examines proposed arms sales and transfer with respect to strategic access of the Persian Gulf. Finally, it examines employment and financial impacts of the Foreign Military Sales program on the United States economy.

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> And I asked "Why is it Lord that when I am facing my darkest moments I look back and I only see one set of footprints?" And the Lord answered, "Because, my son, when you are facing your darkest moments, I am carrying you."
>
> From "Footsteps in the Sand"
> Author Unknown

This thesis is dedicated to Professors Donald Abenheim and Edward Laurance who provided the spark, and Professors' Danny Matthews, Robert Looney, and Ralph Magnus who fanned the ember to flame.

I. INTRODUCTION

> Whereas the past few years have witnessed an increasingly intense debate over the rationales for the conventional-arms supply policies of the United States and other countries, curiously short shrift has been given to traditional geopolitical rationales for arms sales, that is, to the use of arms transfers as a major instrument in the global competition for acquiring and maintaining strategic military access and conversely, for diminishing or denying the access of others. These rationales are often cited almost as an afterthought at the end of long lists of reasons for arms transfers. The omission is particularly surprising because such rationales are being relied upon with increasing frequency, if quietly, within the United States government. (Harkavy, p. 131)

This thesis elaborates on this perception by a comparison of the formal Congressional Notifications (36b Notification) for an arms transfer with the standard written and publicized policies of the Carter and Reagan Administrations. Although these notifications do not necessarily constitute an arms sale or transfer, they do reflect an attitude from the executive branch to the legislative branch and the public sector encouraging support for a particular middle eastern country. In other words they are the basis for the geopolitical rationale in forming a middle eastern foreign policy within a Presidential Administration.

In order to produce a comprehensive model for comparison, a database of over 700 records of 36b Congressional Notifications has been compiled. The notifications are from daily Senate Proceedings and an unclassified listing from the

Defense Security Assistance Agency (DSAA). There is no known database of 36b Notifications available except for my research. This unclassified information provides a means of evaluating an Administration's proposed arms sale or transfer.

This thesis uses the compiled figures of the formal 36b Congressional Notifications database from fiscal year 1977 through fiscal year 1988.

A. HYPOTHESES

Research was based on the following four hypotheses:

1) The Democratic Administration (fiscal years 1977-1980) under President Carter obtained a reduction in United States proposed arms transfers to the Persian Gulf under the Arms Transfer Policy Directive of May 19, 1977.

2) The Republican Administrations (fiscal years 1981-1988) under President Reagan promoted an increase in United States proposed arms transfers in the Persian under the Arms Transfer Policy Directive of July 8, 1981.

3) Foreign Military Sales (FMS) are a major influence in developing United States foreign policy in the Persian Gulf and was the primary instrument used to gain strategic access.

4) Foreign Military Sales will play a major role in defining United States economic and financial issues in the future.

The purpose of this paper, therefore, is to use the Congressional 36b notifications from fiscal years 1977 to 1988 to test these propositions.

B. THE FOCUSSED COMPARISON APPROACH

This study is not intended to be strictly a statistical analysis of foreign arms sales and transfers to the Middle East, but will use the focussed comparison approach.

The focussed comparison approach was chosen over other methodological approaches because it supports a rational theory development that combines the lessons of history, political science, and elementary statistical analysis. Historians teach us that the lessons of the past are often inconsistent. To base an answer using these generalizations is hazardous if not carefully qualified. Political scientists, on the other hand, seek to develop a single comprehensive analytical framework to explain these behavioral inconsistencies of the past. By combining historical outcomes with a scientific analytical framework and correlating the results of the study, the inconsistencies can be clarified (George, p. 44). This method will not give an absolute answer. Yet it does identify some additional critical conditions and variables that caused the inconsistencies so that the rationale for the decisions made can be explained in a more logical manner.

This thesis examines six countries in the Persian Gulf as individual case studies: Oman, United Arab Emirates, Bahrain, Saudi Arabia, Kuwait, Iran.

These countries were selected for three reasons. First, most of them are among the top contenders of proposed arms

sales and transfers during the Carter and Reagan Administrations. Second, their geographic position make-up one of the "five keys that lock up the world" (Till, p. 83). Finally, they are and will continue to be the crux of controversy when attempting to formulate a viable foreign policy within the United States government.

This method uses a standardized set of questions of each case. A systemic analysis of hypotheses 1, 2, and 3 have ten questions asked of each case. The first six questions deal with the 36b notification of proposed arms transfers (the independent variable), and the remainder are about strategic access that resulted from arms sale (the dependent variable). Conclusions drawn from this will be in Chapter VI.

For hypothesis 4, two questions are asked and will be answered in Chapter V. The first question deals with future arms sales and transfers (the independent variable). The second question is answered by applying the data to a model to test the impact of restraint in foreign military sales on the United States economy (the dependent variable). Conclusions to these questions are summarized in Chapter VI.

C. INDEPENDENT VARIABLES: ARMS TRANSFER

1) Is the United States the sole or predominant supplier of military arms?

2) What was the total dollar amount of the 36b Congressional Notifications during the Carter and Reagan Administrations?

3) Did the dollar amount of the 36b Congressional Notifications increase or decrease during the Carter and Reagan Administrations?

4) What are the anticipated payment terms?

5) What was the quantity of the proposed arms transfer?

6) What was the quality of the proposed arms transfer?

D. DEPENDENT VARIABLE: STRATEGIC ACCESS

7) Is the recipient a major United States or Western oil supplier?

8) How strategically important is the recipient's geographic location?

9) Were there any significant events affecting the value of access?

10) Who is the major supplier to adjacent adversaries?

E. INDEPENDENT VARIABLE: FOREIGN MILITARY SALES AND THEIR ECONOMIC IMPACT

11) Are foreign military arms sales and transfers important to the United States economy?

F. DEPENDENT VARIABLE: DOMESTIC IMPLICATIONS OF THE FOREIGN MILITARY SALES PROGRAM

12) What is the economic impact of restraint on prospective military sales to the Persian Gulf?

G. CONCEPT DEFINITION

The following defines the variables used in the above independent and dependent variable questions.

1. Q1

A sole supplier of arms provides 100 percent of the recipient's military equipment. A predominant supplier provides over 50 percent (Mihalka, pp. 49-76).

2. Q2

Section 36b of the Arms Export Control Act of 1976 requires the Administration to notify Congress 30 days before issuing a letter of offer to sell military arms or other related services to a foreign country or international organization. Each 36b Notification represents a single proposed arms sale or transfer to an individual country that exceeds the following legislated dollar threshold:

1) An offer to sell defense equipment and services for $50 million or more,

2) An offer to sell design and construction services for $200 million or more, or

3) An offer to sell major defense equipment for $14 million or more.

Major defense equipment is defined as any item of significant combat equipment on the United States Munitions List having a nonrecurring research and development cost of more than $50 million or a total production cost of more than $200 million (United States FMS procedures, pp. 17-31).

Each 36b Notification lists the proposed recipient, the total dollar amount of the equipment of service, a specific list of the military materials, and a justification for the sale. These records have been compiled for fiscal years 1977 through 1988 so dollar amounts for each proposed arms sale or transfer can be totaled.

3. Q3

Since the data from the 36b Notifications has been compiled into individual fiscal years a comparison can be made of increases or decreases for each administration.

4. Q4

There are four primary types of payment terms: Military Assistance Program (a grant), direct loans repayable in United States currency within a specified time period, a government credit guaranty loan for an extended period of time, or cash.

5. Q5

The quantity of proposed arms sales or transfers are coded as follows:

below $50 million	negligible
$50-$500 million	small
$500-$1 billion	moderate
more than $1 billion	high (Brayton, p. 80)

This scale is an accepted means of measuring the quantity of arms delivered (not to include commitments), and will suffice when appraising proposed arms sales and transfers from the United States. Since 1976 Congress has not turned down an administration's request for an arms sale or transfer to a middle eastern country. Therefore data on a proposed arms sale or transfer is an excellent indicator of the quantity of equipment that may be or has already been agreed upon for sale or transfer.

6. Q6

The quality of a proposed arms sale or transfer was assessed in two contexts: absolute and regional. In absolute, or worldwide, terms, the quality of arms was considered low if the military equipment was old, unsophisticated or could be purchased from a number of different suppliers in the military arms market. For example, equipment from the 1950-1960 vintage such as the Patton Tank or various small arms would fall into this category. If equipment is from the 1960-1970s, it is considered moderate (or average). Equipment of this nature would be the F-5 or the F-15 Fighter aircraft and early models of the AIM-7 Sparrow or AIM-9 Sidewinder air-to air-missiles. The qualifier for high quality military equipment would be if the United States uses the same equipment in its own munitions inventory. The F-16, F/A-18 Fighter/Attack aircraft, Harpoon Missiles and Stinger Missiles would qualify as a high quality weapons.

The second qualifier for equipment quality, regional, is subjective. For example, before the United States will propose a sale involving conformal wing fuel tanks for the F-15 and F-16 Fighter aircraft an agreement must be reached that spells out the requirements for and the restriction placed upon their use. Nevertheless, these tanks extend the aircraft range capability and therefore increases the weapons capability and threat as well. Since the middle east countries around the Persian Gulf, with the exception of Saudi Arabia, are

relatively small, this factor could change the entire defense structure of one country against a perceived opponent.

7. Q7

The quantity of crude oil supplied was coded as follows:

less than 20%	small
20%-40%	minor
40%-60%	moderate
over 60%	major

The world's largest reserves of crude oil are located in the countries that form the perimeter of the Persian Gulf. Since it is financially easy to recover, it remains the cheapest source of crude oil in the world. Industrialized nations of the United States, Western Europe, and Japan have grown dependent on a steady flow of crude oil to keep their manufacturing complexes running. Strategic access to this area is vital to keep the oil flowing to the West.

8. Q8

The host/recipient nations's geographic location was the primary factor in determining geostrategic importance. Emphasis was placed on the presence or absence of strategic mineral resources in Q7. Geostrategic importance was coded as high if a country was located in an area important to Soviet national interests, was adjacent to primary soviet naval operating areas, and commanded naval chokepoints. (Turnbull, p. 13)

9. Q9

Cases of significant events which would temporarily or permanently increase the value of access include wars or conflicts in which United States access is used to help provide support to a recipient from a arms sale or transfer.

10. Q10

Competition within the arms industry has increased because of the presence of more suppliers and fewer buyers. The supplier has to attain the highest level of technology possible to entice a recipient to buy their military equipment. All middle eastern countries are aware of the availability of military equipment and how to approach the economically motivated supplier to buy the equipment. For example the United States is acutely aware of the presence capability of Soviet made military equipment and strives to counter that capability without compromising their current technology and expertise. It is important to pair these capabilities and with proposed arms sales and transfers during each Administration.

11. Q11

Foreign military arms sales and the economy of the United States is examined from three viewpoints. First the study conducted in 1976 by the Office of Management and Budget on how United States industry would be affected by a substantial reduction in arms sales. Second, a working paper by the Regional Conflict Working Group entitled "Commitment to

Freedom" that examines future arms sales as an integrated long-term strategy for the third world. Third, the possible impact on the United States economy if military exports are restricted to the year 2000.

12. Q12

When the United States exports large quantities of military equipment, the U.S. economy receives benefits in terms of domestic income and employment generated from these sales. In addition, commercial firms benefit from these government-to-government because a large military arms trade keeps the industrial base moving when other commercial orders have fallen off. With the United States facing increased budget cuts to reduce the deficits, a large arms trade can be used to reduce that deficit in terms of direct and indirect income generated by these sales. The object of this question is to apply the 36b Congressional Notification data to a model to determine the impact on the U.S. ecomony.

By asking the same ten standardized questions of each case, a focussed comparison of the Carter and Reagan Administration's 36b Notifications and foreign policy objectives in the Persian Gulf can be accomplished. In addition with the 36b Notification data and information, the last two questions can examined.

Before beginning the case studies, an examination of the background and basic review or arms transfers is desirable.

II. BACKGROUND

> When a process involves power, authority, culture, consensus, and conflict, it captures a great deal of national political life. (Wildavsky, p. xiii)

Arms transfers are not simply buyer-seller transactions. In order to produce a worthwhile study the various perspectives should be reviewed. These perspectives involve the relationship between historical background, Congressional power, and public policy as represented by the President.

A. HISTORIC PERSPECTIVE

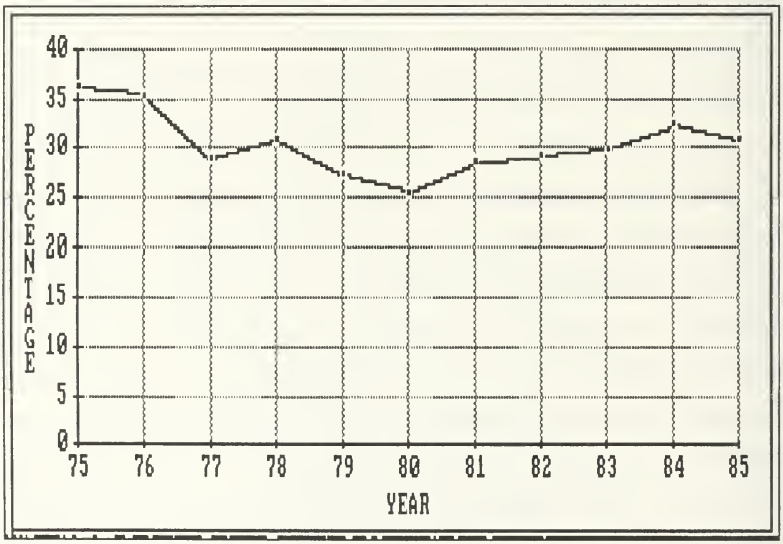
A systemic analysis of armed confrontations, scholarly and popular literature clearly demonstrates that the employment of nuclear weapons is diminishing as an influence on the stability of one country's ideology over another. In fact, nations with a nuclear weapons delivery capability have elected not to use this type of weaponry in every case but one. The trend of projecting military strength is moving towards conventional weapons and tactics. This is not to downplay the political importance nor the technical creditability that a nation receives when it goes "nuclear." Yet, there is a clear indicator that a nation's political-military influence is directly related to an ability to organize, train, arm and project a conventional weapons capability. The two examples that come to mind are the Soviet Union's invasion

of Afghanistan and the United States involvement in Vietnam. In both instances there appeared to be an unstated commitment not to use nuclear weapons to assure victory, though clearly both superpowers had the capability. Both superpowers willingly committed troops, conventional arms, and organizational skills in an attempt to sway the outcome of the conflict. The fact that neither superpower was successful proves the point of a diminishing deterrence capability of nuclear weapons.

Another approach in the sphere of political-military influence has been the economic sanction. The basic assumption is: If Country A is economically blacklisted by Country B, a major world economic power, then an automatic economic ban is invoked by those nations politically aligned with Country B. Theoretically, Country A will find it extremely difficult to survive economically and therefore a change in political attitude is promoted without military response. In the case of the United States foreign policy objectives, the results of this methodology have been mixed. No one can deny that economic sanctions against Iran essentially shut them out of the world's arms, commercial goods and services market. On the other hand, economic sanctions against the Soviet Union, Israel and South Africa have not worked. In fact they have backfired. The Soviet Union was able to purchase their grain from other countries in large enough quantities so that the "wheat" embargo imposed by the United States was not

effective. For Israel and South Africa the embargo on military supplies and small caliber weapons compelled them to develop their own production facilities and in some areas they are in competition with the United States.

Since 1975 almost every middle eastern government has spent over 25% of its central government expenditures for the military arms and services (Figure 2.1).



Source: ("World Military Expenditures and Arms Transfers 1987," p. 45)

Figure 2.1 Percentage of Military Expenditures per Central Government Expenditures

These budget increases have contributed to a substantial growth in standing forces and subsequently placed new demands on the quality and quantity of arms in the conventional weapons market. These demands are significant in that they carry the implication that every Third World country is looking for a supplier for their conventional arms needs. Further, this implication has increased pressure on First and Second World countries to develop a workable foreign policy and mandates a definition of their position regarding arms transfers and sales on the world's political stage.

These new demands have in effect caused industrialized nations to increase their own military expenditures to produce more complex conventional weapons. This increase in innovation is the catalyst which drives the reactions among Third World arms recipients. These reactions include an increased level of sophistication and development of deadlier weapons. When technology is combined with larger standing forces, regional conflicts will be more dangerous for the combatants. Additionally, the conflict may spread to neighboring states.

Another implication is that an arms transfer is the primary method used by nation-states to improve their military capabilities with modern conventional weaponry. With the ease in obtaining conventional weapons, the superpowers have found that they can no longer influence smaller nations from fighting. For example, the Soviet Union tried to de-escalate the Iran-Iraq War by slowing down the transfer of weapons to

Iraq. Iraq turned to the world arms market and acquired weapons from France and West Germany with no political strings attached (Papp, p. 412).

The motivation for industrialized countries to sell and ship arms can be grouped into either a political sphere, an economic sphere or a combination of both.

Politically the struggle for dominance between East and West plays the major role in all arms sales or transfers. The two major suppliers, the Soviet Union and United States, seek not only expansion of their political ideologies, but also desire to secure base rights, overseas facilities, and transit rights to support the deployment and operations of military forces and intelligence systems. Recently another factor has been realized. If the United States does not offer arms sales, others such as France or Brazil, will step in and do so. The Third World recipient that lacks funds or raw materials to barter are the most vulnerable to political string pulling. On the other hand the Middle East oil-rich states have the cash and will not hesitate to turn to other willing suppliers. Additionally, a transfer of arms supports diplomatic efforts to resolve major regional conflicts by maintaining an equal balance to a friendly or regionally dominant state. This strategy of influence often precludes a more direct form of military involvement. Another political strategy is to enhance the quality and commonality of the capabilities of major Allies participating in joint defense

arrangements. This tactic serves to influence the military elite and provide leverage with individual governments on specific issues. (Papp, p. 413)

Economically, for the United States and other Western nations, arms sales mean money. Cash is playing a more important role in the economic deficit and in equalizing the international balance of trade payments. Other economic benefits are: a) the increase in total production resulting from weapons sold overseas reduces unit cost of domestically used weapons. This results from an increase in the total baseline over which the research, development and production set-up costs are amortized; b) foreign sales provide a place to deplete older inventories of weapons no longer used. Since the demand for newer technology drives suppliers to devote more expertise in the development of more modern weapons, a self-perpetuating cycle is generated; c) arms sales provides stable employment in the short-run and keeps the military industry operating at a wartime level just in case a long-run need should arise; and d) the sale of weapons can open the door for an inflow of raw materials, and possibly development of a civilian non-military market for other goods and services. (Papp, p. 414; Brzoska, p. 125)

B. LEGISLATIVE PERSPECTIVE

United States foreign aid in the form of security assistance to Third World nations communicates a powerful message to developing nations as well as the rest of the world.

Security assistance in the form of military equipment and related services is perceived as support for the independence and protection by the United States for those Third World nations. More importantly, in spite of waning budgets and Administration and Congressional entanglements, it is a commitment by the Presidential Administration to promote more democratic forms of government, promotion of human rights and a strong deterrent to communism. This perception of unity with the United States is often more important than the actual amount of aid. The program, however, must follow up with actual aid or creditability is lost.

Congressional initiatives of the early 1970's marked the beginning of more effective controls over United States government arms sales and transfers. These efforts culminated in 1976 with the passage of the International Security Assistance and Arms Export Control Act (AECA). Prior to an increased Congressional awareness the President had somewhat of a free hand to send arms and supplies to other allies when he deemed appropriate. The Administration's usual reason was, arms were transferred to ensure strength through military and economic assistance to friends of the United States. In fact up until the passage of AECA, the most significant Congressional initiative was the adoption of a provision permitting Congress to disapprove a major arms sale. The major focus of Congressional control incorporated by the AECA act was:

1) To adopt a provision permitting Congress to disapprove a major arms sale,

2) To require an annual report describing and justifying the following year's arms transfer program. This is an expansion of an existing quarterly reporting requirement that was intended to keep Congress apprised of the status of arms exports,

3) Requirement of a Statutory Congressional Notification: (Section 36b) that states: The Administration must notify Congress 30 days before issuing a letter of offer to sell defense articles and services for $50 million or more, design and construction services for $200 million or more, or major defense equipment for $14 million or more to a foreign country or international organization. It must notify Congress 15 days before issuing a Letter of Offer to Sell for such sales to NATO, NATO member nations, Japan, Australia, or New Zealand. This statutory notification must be sent to the Speaker of the House of Representatives and the Chairman of the Senat Foreign Relations Committee. It must contain the following information: name of the proposed recipient, amount of the sale in US dollars, amount and description of the equipment, impact on US munitions stocks, and justification for the sale,

4) Additional reports includes information concerning issuance of commercial export licenses for major weapons, possible violations of an arms sales agreement, proposed third world country transfers of United States supplied weapons, and a listing of agent fees paid or offered by United States defense contractors to win an overseas sale (U.S. Committee on Foreign Affairs, Changing Perspectives, pp. 8-9),

5) Requirement that the Administration will consider several other issues before proceeding with foreign military aid and sale including: nuclear transfers; acts of discrimination against U.S. nationals on the basis of race, religion, national origin, or sex; protection of terrorists by recipient nations; and impact of sales on U.S. combat readiness.

The AECA charges the Secretary of State with administering the Security Assistance program. Since the Department of Defense (DOD) has the majority of the arms, military services and expertise, primary action office for security assistance has been delegated to DOD and is called the Defense Security Assistance Agency (DSAA). DSAA is responsible for planning,

administering, and accounting for all DOD involvement with Security Assistance. The Director of DSAA reports to the Undersecretary of Defense for Policy and works closely with the State Department.

The funds for security assistance are appropriated to the President as a part of the United States annual budget and are to be administered by the State Department. In addition they are separate from the funds appropriated for national defense. The Comptroller General is responsible for ruling (based on General Accounting reports) on the legality of the uses of funds within the Security Assistance program by Department of State or by any of the DOD departments.

DOD must be compensated from the security assistance funds for any equipment or services it provides but are not allowed to make a profit or sustain a loss for the equipment or services. Instead DOD can charge a higher price for amortization of equipment research and development, and for service costs incurred in administration of the security assistance program. These two provisos normally averages to a premium of nine percent above DOD's actual procurement and operations costs. (U.S. Commission on Integrated Long-Term Strategy, pp. 23-24)

C. EXECUTIVE PERSPECTIVE

1. President Carter's Arms Transfer Policy

On May 19, 1977, President Carter announced his Administration's policy regarding the transfer of conventional

arms sales to foreign countries by the United States. His policy was, in effect, a continuation of the Congressional initiatives.

"Henceforth", said President Carter, "the use of conventional arms transfers would be viewed as an exceptional foreign policy implement, to be used only in instances where it can be clearly demonstrated that the transfer contributes to our national security interests." The policy went on to establish a set of controls and checks on all foreign arms sales with the exception of NATO members, Japan, Australia, and New Zealand. The Carter controls were to be binding on sales to non-exempted nations unless "extraordinary circumstances" necessitated a Presidential waiver of them or the President determined that "advanced weaponry" needed to be sold to nations friendly to the U.S. to offset quantitative or other disadvantages in order to maintain a regional balance." (U.S. Changing Perspectives on U.S. Arms Transfer Policy, p. 10) The policy included the following objectives:

1) A "ceiling" on the dollar volume of arms sales and related services would be reduced in fiscal year 1978 below the fiscal year 1977 total. This does not include the four exceptions noted above,

2) A reduction in the sale of sophisticated and costly U.S. weaponry by imposing qualitative restrictions on U.S. arms sales.

The qualitative restrictions of 2) included guidelines that forbid:

a) First introduction into a region by the U.S. of a newly developed, advanced weapons system which could create a new or significantly higher combat capability,

b) Most major co-production agreements with foreign governments, with restrictions on Third Country exports for those entered into,

c) Development or significant modification of advanced weapons system solely for export,

d) Sale of newly developed, advanced weapons until they were operationally deployed with U.S. forces.

3) The "burden of persuasion" would be placed on the proponents, not the opponents, of an arms sale,

4) An attempt would be made to remove the incentive to promote foreign arms sales in order to lower the unit costs for the Department of Defense,

5) An effort to dampen arms sales promotion by forbidding all U.S. embassies and military representatives to promote arms sales. Not permitting commercial agents to promote their weaponry unless prior authorization had been received form the State Department,

6) An overt attempt to curtail worldwide arms sales through multinational cooperative agreements with arms suppliers,

7) U.S. security assistance programs will work hand-in-hand with the Congress to promote and advance respect of human rights in recipient countries. Also the economic impact of arms transfers to countries receiving economic assistance was to be considered (U.S. Changing Perspectives on U.S. Arms Transfer Policy, pp. 11-12).

This new political perspective of controlling arms sales with a ceiling and making an clear effort to cooperate with Congress was a radical departure from previous administrations. Both Presidents Nixon and Ford were at odds with Congress over what was perceived as increased micromanagement of their foreign policy objectives (Changing Perspectives on U.S. Arms Transfer Policy, p. 12).

2. President Reagan's Arms Transfer Policy

On July 8, 1981, President Reagan signed a directive on conventional arms transfer policy that set the tone for a new U.S. foreign policy. The Reagan policy directive emphasized what the Administration viewed as a significant growth in recent years of "challenges and hostility toward fundamental United States interests, and the interests of its friends and allies." Such trends could "threaten stability in many regions" and "progress toward greater political and economic development." (U.S. Changing Perspectives on U.S. Arms Transfer Policy, p. 32)

The directive went on to point out that the U.S. must be prepared to help its friends and allies through arms transfer and other forms of security assistance. "Such transfers," the policy directive states, "component American security commitments and serve important United States objectives." In this context, the Reagan Administration viewed conventional arms transfers and transfers of other defense articles and services as "an essential element of its global defense posture and an indispensable component of its foreign policy." His objectives were laid out as follows:

1) Help deter aggression by enhancing preparedness of friends and allies,

2) Increased effectiveness of U.S. armed forces by working directly with armed forces of allies and friends, and to project power in response to threats posed by mutual adversaries,

3) To deploy and operate with allies on a global scale.

4) To demonstrate U.S. interest by not allowing allies and friends to be at a military disadvantage,

5) To foster regional and internal stability by encouraging peaceful resolution of disagreements,

6) Help to enhance United States defense production capabilities and efficiency. (U.S. Changing Perspectives on U.S. Arms Transfer Policy, pp. 32-33)

The Reagan policy directive emphasizes that the U.S. will "evaluate requests primarily in terms of their net contribution to enhanced deterrence and defense." It also set out broad guidance regarding the transfer of weapons and generally related items. These policy provisions stipulate that:

1) Co-production requests and those for transfer of "sensitive or advanced technology will receive special scrutiny,"

2) To help avoid any adverse impact on friendly and allied nations by encouraging them to assume burdens for which their economies are ill-prepared, "careful consideration will be given to lower-cost alternatives including adaptations of military equipment for sale abroad." It is recognized that "first-line systems may not suit the needs of many countries." Accordingly, "consideration of the full range of available American alternatives will take place at every stage of the review,"

3) U.S. representatives overseas "will be expected to provide the same courtesies and assistance to firms that have obtained licenses to market items on the United States Munitions List as they would to those marketing other American products." (U.S. Changing Perspectives on U.S. Arms Transfer Policy, pp. 33-34)

Finally, the policy directive notes that the United States retains a general interest in arms transfer restraint, but will not "jeopardize it own security need through a program of unilateral restraint." (U.S. Changing Perspectives on U.S. Arms Transfer Policy, p. 34)

Before beginning the case studies, it is desirable to examine the mechanisms that were used for gathering, compiling and evaluating the financial and foreign policy that surrounds foreign military sales.

III. PROPOSED ARMS SALES AS MEASUREMENT OF FOREIGN POLICY

A. METHODOLOGY

Louscher and Salomone point out that most research documentation and subsequent publication of United States arms sales and transfer policies are plagued by eight recurring errors. They explain that these errors stem from methodological processes as well as a general availability of resource material that is incomplete and inaccurate (Louscher and Salomone, pp. 22-25). These flaws are characterized by:

1) Frequent use of current dollars as the unit of measurement,
2) A focus on foreign military sales alone,
3) A focus on arms sales agreements alone,
4) A use of truncated time frames,
5) Limited differentiation of recipients,
6) Failure to link arms sales and transfers to United States foreign policy priorities,
7) Failure to differentiate types of defense articles and services,
8) Use of nonisomorphic data.

The reason for some of these errors was prior to 1976 information about United States arms sales and transfer data was not easily accessible. In fact, it was sketchy at best. President Ford unclogged this informational chokepoint by signing into law the Arms Export Control Act (AECA) in the closing months of his Presidency.

The AECA was not designed to stop or curtail arms sales or transfer that were necessary for the support and defense of allies, but was enacted to provide a paper trail for those arms to third world countries. Prior to the AECA, the President, or by his direction to the State Department, had a free hand in transferring military arms and services anywhere in the world without notifying anyone. In addition, attempts to track governmental military arms sales or services was further exacerbated by a lack of follow-on public records after actual the transfer took place. The source data consisted of weapons that were confirmed and observed to be in place.

The AECA contains two provisions that make classification and pursuit of proposed arms sales or transfers somewhat easier. First it was a Congressional mandate to all consequent Presidential Administrations to provide and publish information concerning proposed arms sales and transfers. This information was to be transmitted to Congress in a formal letter thirty days prior to signing a Letter of Offer to Sell. The letter was to contain the recipient, the amount of the proposed sale, a listing of equipment and a justification paragraph. As a matter of convenience and ease of understanding, the amount of the proposed arms sale or transfer is to be linked to a monetary threshold. These thresholds are: a) defense articles and services of $50 million or more; b) design and construction services for $200 million or more; and

c) major defense equipment of $14 million or more to a foreign country or international organization. (U.S. Military Sales Laws, p. 29)

Although these criteria cannot cover all proposed arms sales and transfers (i.e., those that fall below the monetary thresholds), it does provide important pieces to the puzzle of what was sent to whom and for how much. Also when considering the cost of modern first-line military equipment in the late 1970's, a monetary threshold of this magnitude was not unrealistic. For example, an F-16 costs approximately $10 million and no country would attempt a buy of just one modern U.S. jet fighter.

The second provision of the AECA permitted Congress to disapprove a major arms sale. The Congressional mood at the time was that they should play a greater role in all arms sales and transfers to foreign countries or international organizations. With this clause the House and Senate would be able to enforce greater restrictions and possibly tighter controls on arms sales or transfers brought to their attention by the legislated monetary threshold. It also provided a vehicle for two additional Congressional concerns; the worldwide concern for human rights and the continuing transfer of first-line U.S. military hardware to the volatile Middle East. Thus far, Congress has chosen not to use this option but does use the threat of its use to warn the administration

to take a second look at the request before it reaches the Senate floor for debate.

B. SCOPE OF THESIS DATA

This thesis uses a database created from the AECA 36b Congressional Notifications from October 1, 1977 to September 30, 1988. The data were accumulated independently from two sources; the daily Senate Proceedings from October 1977 through September 1988 and an unclassified listing of proposed arms sales provided by Defense Security Assistance Agency (DSAA) in Washington D.C.

My research consisted of a detailed examination of the daily Senate Proceedings, from October 1977 through September 1988 to accumulate copies of the formal 36b Notifications letters. This method was conducted twice to ensure completeness and when finished produced 602 formal notification letters. The listing of unclassified proposed arms sales received from DSAA contained 689 records. The contents of both research efforts were compared to correct any discrepancies and ensure completeness and consistency. The comparison resulted in a total of 720 records of proposed arms sales and transfer.

The differences between the two research efforts can be explained as follows. First, the data file of 36b Notifications from the Senate Proceedings has all formal notification letters including those with only proposed recipient and dollar amount but the list of equipment was deleted for

classified reasons. Records of this type were not included in the DSAA data listing. The remaining 36b Notifications that were in the DSAA data listing were not reprinted in the daily Senate Proceedings. Each record was checked a third and final time accuracy. It is believed that this database of proposed arms sales and transfers is complete and does not overlap time periods or double-count funds and equipment. This database provides the researcher three things.

First, it provides a true and accurate accounting of proposed arms sales and transfers by the United States during President Carter and both President Reagan's Administrations.

Second, it contributes to the question posed by Laurance and Sherwin in 1978 that to date has not been completely answered: "None of these...questions can be answered confidently without first creating valid and reliable data on arms transfers. Thus it is important to ask what arms transfer data are available and how useful are they?" (Laurance and Sherwin, p. 88) This database is valid and reliable.

Finally, the database provides a valid comparative baseline that is not connected with declassified figures generated by the U.S. government's intelligence services or an interpretation of observed data by the Stockholm International Peace Research Institute. It comes from public records. Specifically the database provides the following:

1) The date of the transaction, the dollar figure, equipment type, a list of equipment or military related services, and the name of the recipient of a proposed sale of United States military arms and services,

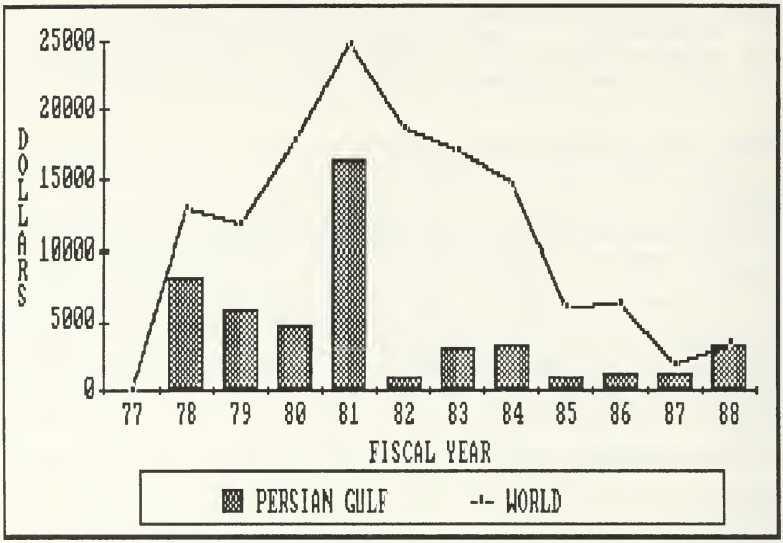
2) It does not focus strictly on foreign military sales and agreements. The 36b Congressional Notification is required prior to a Letter of Offer and Acceptance or any signed agreement to sell any military arms or services,

3) It concentrates on specific time periods (fiscal years) and identifies recipients,

4) When tabulated it provides a dollar amount for each particular fiscal year and differentiates between types of proposed defense articles and services for sale,

5) It can link arms sales and transfers to the foreign policy priorities of the United States. The 36b Congressional Notification originates from the Executive Branch, therefore it is a statement of the real foreign policy priorities of the Oval Office vice published broad policy directives.

This database does not mean that the arms sale or transfer actually took place. Only the signed sales agreements show this (Figure 3.1). This database, however, gives a clearer representation of what each administration was willing to sell to a foreign country or international organization. The material extracted from the database supports an opinion of which middle eastern country had priority and what kind of military equipment the United States government was willing export to that country.



Source: Compiled by author from Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 3.1 Proposed Arms Sales Persian Gulf versus World ($$$ in Millions)

It is with this confidence in the database of 36b Congressional Notifications that we can now examine the six cases.

IV. PERSIAN GULF

Figure 4.1 shows the entire Persian Gulf area and provides a geographic perspective for the case studies which follow.

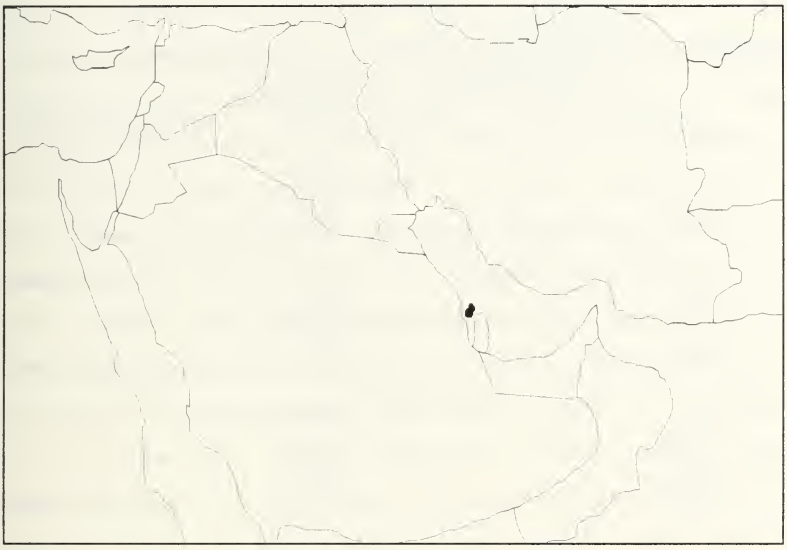


Figure 4.1 Persian Gulf

A. SAUDI ARABIA

1. Is the United States the Sole or Predominant Supplier of Military Arms?

Until 1987 the United States was the predominant supplier of military arms and related construction services for Saudi Arabia. From 1950 to 1977, Saudi Arabia depended on

the United States for training and a number of other Western sources for military supplies and services. In 1978 the United States logically shifted some of its political emphasis in the Gulf to Saudi Arabia because of Iran's domestic unrest. After the fall of Iran's government in 1979, the political and strategic importance of Saudi Arabia increased exponentially. From this point in time the United States has clearly tried to dominate sales agreements (including construction) with Saudi Arabia. In fact Saudi Arabia has surpassed Israel in recipient shares in United States exports of major weapons from 1982 to 1986 (SIPRI, p. 191). Whether the United States will remain the predominant supplier remains to be seen. The fierce congressional debates over the F-15 and the E-3A sales reinforced the Saudi apprehensions over the United States ability to remain a reliable supplier of military equipment (Cordesman, p. 252). Even with the substantial increase of United States military arms and services, the Saudis kept an open communication with Italy and France for naval equipment and with West Germany for equipment for the Saudi National Guard (Cordesman, p. 253). Recently, the Saudis have signed a Letter of Agreement with Great Britain for 72 Tornado jet fighters to include air-to-air and air-to-ship missiles for $5.5 billion (SIPRI, p. 262). This sales agreement will eventually lead to other follow-on agreements for advanced training and maintenance support.

2. What was the Total Dollar Amount of the 36b Congressional Notifications During the Carter and Reagan Administrations?

The total dollar amount of proposed arms sales or transfers during the three administrations by fiscal year are as shown in Table 4.1.

TABLE 4.1

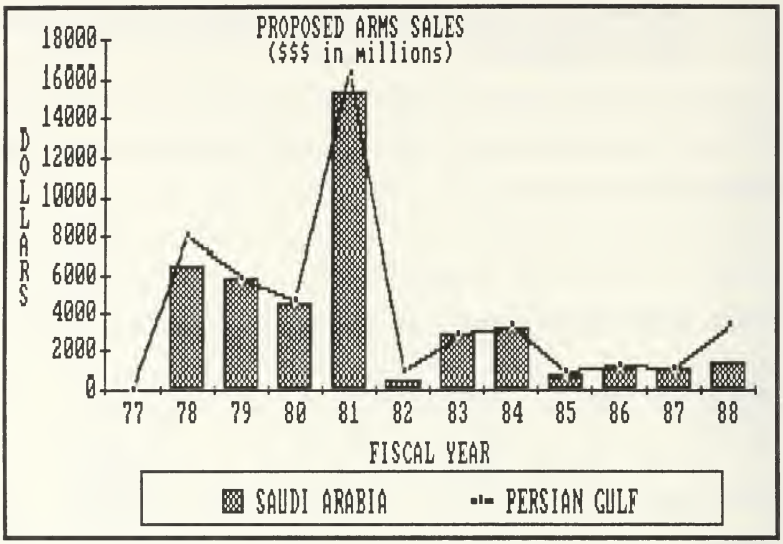
TOTAL PROPOSED ARMS SALES OR TRANSFERS FOR SAUDI ARABIA
(in Millions of Dollas)

Administration	Fiscal Year	Amount
Carter	1978	$ 6,501
	1979	5,827
	1980	4,571
SUB-TOTAL		$16,899
Reagan I	1981	$15,326
	1982	562
	1983	2,933
	1984	3,224
SUB-TOTAL		$22,045
Reagan II	1985	$ 777
	1986	1,056
	1987	1,085
	1988	1,397
SUB-TOTAL		$ 4,315
GRAND TOTAL		$43,259

Source: Compiled by author from U.S. Senate Proceedings, October 01, 1977 to September 30, 1988.

3. Did the Dollar Amount of the 36b Congressional Notifications Increase or Decrease During the Carter and Reagan Administrations?

Figure 4.2 contrasts the proposed arms sales or transfers to Saudi Arabia compared to the amount of proposals to the Persian Gulf by fiscal year.



Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 4.2 Proposed Arms Sales for Saudi Arabia versus Persian Gulf

Figure 4.2 shows a steady decrease in the Carter Administration arms sales or transfer proposals for Saudi Arabia from a high of $6,501 millions in fiscal year 1978 to $4,571 millions in fiscal year 1980. Fiscal year 1977 shows no proposed arms sales or transfers were made. During the first year of the first Reagan Administration, tremendous increases in proposals to Saudi Arabia were made. In fiscal year 1981, there is a substantial increase in proposed arms

sales valued at $15,326 millions. This is attributed to the proposed sale and subsequent agreement of the E-3A Sentry AWACS system. Yet, from fiscal year 1982 to the end fiscal year 1988 (the second Reagan Administration) the graph shows a dramatic decline in proposed arms sales or transfers with an average of $1,580 millions per year.

4. What are the Anticipated Payment Terms?

Saudi Arabia has not relied on the Military Assistance Program (MAP) or the Foreign Military Sales Financing Program for any major purchases of military equipment or services since 1974. Prior to 1974 Saudi Arabia used grants and guaranteed loans for training their military officers, totaling $25.3 million, and a relatively small amount of military equipment and construction totaling $254.2 million (DSAA, pp. 24,60,84). Since 1974 Saudi Arabia has consistently paid cash for all transactions involving military arms and services. This is because of the ability to pay due to large reserves of funds from oil sale receipts. An equally important reason is their heritage of anti-colonialism that has blossomed into a fervent desire for a "no political strings attached" arms buying policy. There is no reason to believe that this policy will change.

5. What is the Quantity of Proposed Arms Transfers?

The quantity of United States proposed military arms and related services to Saudi Arabia has been high. Table 4.2 separates the 36b Congressional Notification data into two

categories: construction/training and military arms/associated support equipment, but for ranking purposes they are added together.

TABLE 4.2

PROPOSED ARMS SALES OR TRANSFERS TO SAUDI ARABIA BY CATEGORY
(in millions of Dollars)

Administration	Fiscal Year	Construct/Train	Arms/Support
Carter	1978	$ 3,951	$ 2,550
	1979	5,135	691
	1980	3,682	889
Reagan I	1981	4,861	10,465
	1982	150	412
	1983	2,609	324
	1984	2,142	1,082
Reagan II	1985	777	0
	1986	0	1,056
	1987	0	1,085
	1988	0	1,397
TOTALS		$23,307	$19,951

Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

6. What was the Quality of the Proposed Arms Transfer?

The arms sales or transfer proposals to Saudi Arabia in absolute terms is a wide spectrum of unsophisticated weapons to the top-of-the-line in modern technology (Table 4.3). The Carter Administration concentrated on assisting the modernization of the Saudi military rather than sending highly technical weaponry. For example a proposed sale of 60 F-15's in 1978 was only a moderate gain in capability since it did

TABLE 4.3

PROPOSED ARMS SALES TO SAUDI ARABIA
(in millions of Dollars)

Administration	Fiscal Year	Amount	Equipment
Carter	1978	$ 70.6	SUPPLY SUPPORT AGREEMENT
	1978	150.0	CONTRACTOR TRAINING FOR SAUDI NAVAL EXPANSION PROGRAM
	1978	21.0	15 BULLDOZERS
	1978	496.0	CONTRACT FOR FIELD ARTILLERY CENTER
	1978	174.0	CONSTRUCTION OF A MILITARY ADMIN SCHOOL FOR ARMY CORPS OF ENGINEERS
	1978	40.0	FOLLOW-ON FOR SAUDI NAVAL SUPPLY CENTER AND SUPPLY DEPOT
	1978	220.0	PHASE ONE TRAINING OF NAT'L GUARD WITH LOGISTICS
	1978	75.0	UNKNOWN CLASSIFIED
	1978	50.0	65 HARPOON MISSILES
	1978	1,300.0	THREE YEARS SUPPORT FOR PEACE HAWK
	1978	604.5	AMENDMENT FOR ADDITIONAL FUNDS FOR SAUDI ORDNANCE CORPS PROGRAM

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1978	2,500.0	60 F-15 AIRCRAFT WITH AIM-9F AND AIM-7F MISSILES AND PILOT TRAINING
	1978	800.0	TWO SHIP REPAIR FACILITIES
	1979	147.6	AMENDMENT FOR ORDNANCE CORPS PROGRAM
	1979	93.5	100 HARPOON MISSILES
	1979	44.3	172 DRAGON ANTI-TANK TRACKERS AND 4292 DRAGON MISSILES
	1979	238.0	CONSTRUCTION OF ENGINEER SCHOOL
	1979	70.6	INITIAL STOCK OF NAVAL SUPPLY CENTER AND SUPPLY DEPOT
	1979	14.8	5 VULCAN AIR DEFENSE SYSTEMS
	1979	1,230.0	PHASE II OF SAUDI NAT'L GUARD MODERNIZATION PROGRAM
	1979	426.0	SUPPORT FOR F-15 PROGRAM
	1979	1.171.9	CONTRACTOR TECHNICAL ASSISTANCE
	1979	24.3	15 M728 COMBAT VEHICLES
	1979	42.4	32 M60A1 TANKS

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1979	60.6	32 M60A1 TANKS CHASSIS
	1979	70.6	FOLLOW-ON SUPPORT FOR SAUDI NAVAL EXPANSION
	1979	460.0	CONSTRUCTION AND OTHER RELATED PROCUREMENT
	1979	300.0	DESIGN AND CONSTRUCTION OF MILITARY FACILITIES
	1979	1,433.0	ADDITIONAL TECHNICAL SERVICES AND SUPPORT
	1980	44.3	4900 DRAGON ANTITANK MISSILES
	1980	77.5	140,000 ROUNDS OF MORTAR, HOWITZER, AND TANK GUN AMMO
	1980	65.0	GROUND FORCE AMMO
	1980	350.0	ADDITIONAL F-15 SPARES AND SUPPORT EQUIPMENT
	1980	1,214.5	THREE YEAR EXTENSION OF CURRENT CONTRACT FOR ARMY CORPS OF ENGINEERS
	1980	12.7	50 TOW GUIDED MISSILE LAUNCHERS AND 1000 MISSILES
	1980	464.0	FUNDING FOR CIVIL ENGINEERING FOR SAUDI EXPANSION PROGRAM

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1980	53.0	2 F-15C AIRCRAFT TO BE RETAINED IN U.S. FOR IMMEDIATE REPLACEMENT
	1980	473.0	CIVIL ENGINEERING AND RELATED SERVICES FOR SAUDI MILITARY ACADEMY
	1980	1,500.0	CONSTRUCTION FOR F-15 AIRCRAFT HANGARS, REPAIR SHOPS, HOUSING AND ROADS
	1980	30.0	CONSTRUCTIONS FOR COMMAND AND OPERATIONS CENTER
	1980	70.0	14 F-15 ENGINES AND 71 SPARE ENGINE MODULES
	1980	96.8	158 TANK CONVERSION KITS
	1980	120.0	1000 CBU-58 MUNITIONS, 1000 CBU-71 MUNITIONS, 3435 GBU LASER GUIDED BOMBS, 660 AIM-9P MISSILES, 916 AGM-65A MAVERICK MISSILES
REAGAN I	1981	200.0	NAVAL EXPANSION PROGRAM FOLLOW-ON SUPPORT
	1981	2,400.0	8 BOEING 707 AIRCRAFT, THREE YEARS SUPPLY SUPPORT, THREE YEARS CONTRACTOR SUPPORT, TRAINING AND LOGISTICS

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1981	232.0	1177 AIM-9L MISSILES
	1981	49.0	AIRCRAFT ROCKETS (2.75/HE) AND GENERAL PURPOSE BOMBS WITH FUZES
	1981	504.0	DESIGN AND CONSTRUCTION SERVICES FOR SAUDI NAVAL ACADEMY
	1981	30.0	COOPERATIVE LOGISTICS SUPPLY CONTRACT
	1981	66.0	PROPULSION ENGINEERING TRAINING FOR SAUDI NAVAL EXPANSION PROGRAM
	1981	60.0	TELECOMMUNICATIONS EQUIPMENT FOR SAUDI NAVAL EXPANSION PROGRAM
	1981	48.0	FLIGHT SERVICES TRAINING FOR FISCAL YEAR 82
	1981	9.0	18 155MM TOWED HOWITZERS
	1981	98.0	9 AN/TPQ-37 MORTAR RADARS AND 6 AN/TPQ-37 ARTILLERY LOCATING RADARS WITH TWO YEARS OF SPARE PARTS
	1981	350.0	F-15 AIRCRAFT SUPPORT

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1981	1,700.0	DESIGN, CONSTRUCTION SERVICES FOR ADDITIONAL NAVAL FACILITIES INCLUDING A FLEET HEADQUARTERS BUILDING
	1981	110.0	101 SETS OF CONFORMAL FUEL TANKS FOR F-15 AIRCRAFT
	1981	900.0	MANAGEMENT AND CONTRACTOR SERVICES FOR 500 BED HOSPITAL FOR SAUDI NAT'L GUARD
	1981	5,800.0	FIVE E-3A AWACS AIRCRAFT WITH SUPPORT FOR THREE YEAR AND IN CONUS TRAINING
	1981	42.0	TRAINING AND SUPPORT CONTRACT FOR SAUDI NAVAL FORCES
	1981	255.0	CONTRACT FOR CONTINUATION OF USN PROJECT MANAGEMENT
	1981	75.0	1 AN/TPS-43 RADAR SYSTEM WITH MODIFICATION FOR 3 TPS-43V CONFIGURATION
	1981	846.0	SERVICES FOR SAUDI NAVAL EXPANSION PROGRAM
	1981	180.0	SERVICES AND MATERIALS FOR SAUDI NAVAL C3 SYSTEM

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1981	1,300.0	TWO YEAR SUPPORT FOR SAUDI MISSILE SHIPS AND GUN-BOATS
	1981	42.0	500 FIVE-TON CARGO TRUCKS
	1981	30.0	OPERATIONS AND COMMAND CENTER
	1982	22.0	2010 I-TOW MIS-SILES
	1982	350.0	10 RE-5F TACTICAL RECON AIRCRAFT AND 5 F-5E/F AIRCRAFT CAMERAS AND THREE YEARS SUPPORT
	1982	56.0	EXTENSION OF EXISTING AGREE-MENT WITH SAUDI NAVY
	1982	94.0	COOPERATIVE LOGISTICS SUPPLY AGREEMENT
	1982	40.0	2111 I-TOW MIS-SILES, 2163 PRAC-TICE MISSILES AND 106,000 BLAST SIMULATORS
	1983	408.0	AMENDMENT FOR ADDITIONAL PUR-CHASE OF SER-VICES, EQUIPMENT AND MATERIALS FOR CHECK-OUT OF C3 SUITE
	1983	116.0	ADDITIONAL SUPPLY SUPPORT FOR SHIP RELATED SPARES

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1983	149.0	762 MK-12 IFF SYSTEMS WITH SPARE PARTS SUPPORT FOR THREE YEARS
	1983	31.0	ADDITION CONTRACT FOR TECHNICAL ASSISTANCE
	1983	700.0	DESIGN AND CONSTRUCTION SERVICES FOR AN AIRFIELD
	1983	170.0	COOPERATIVE LOGISTICS SUPPLY SUPPORT AGREEMENT
	1983	130.0	POST SHIP DELIVERY SUPPORT AND SERVICES
	1983	26.0	2538 I-TOW MISSILES
	1983	33.0	42 155MM TOWED HOWITZERS
	1984	40.0	200 STINGER MISSILE SYSTEMS WITH 200 INITIAL MISSILES AND OPTION TO PURCHASE 200 ADDITIONAL
	1984	63.0	COOPERATIVE LOGISTICS SUPPLY SUPPORT ARRANGEMENT
	1984	126.0	192,016 ROUNDS OF 155MM AMMO
	1984	176.0	100 M60A3 TANKS
	1984	57.0	SUPPLY SUPPORT ARRANGEMENT FMSO

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1984	350.0	10 RF-5E AIRCRAFT 4 F-5E AIRCRAFT 1 F-5F AIRCRAFT WITH SUPPORT
	1984	330.0	AIRCRAFT AND AIRBASE SUPPORT SERVICES FOR F-5 AND F-15 PEACE HAWK VIII
	1984	131.0	COOPERATIVE LOGISTICS SUPPLY SUPPORT AGREEMENT
	1984	1,500.0	ADDITIONAL CONTRACTOR TECHNICAL SERVICES
	1984	119.0	1600 AGM-65B MAVERICK MISSILES AND 9 TRAINING MISSILES
	1984	61.0	SUPPORT EQUIPMENT FOR U.S. ORIGIN SYSTEMS
	1984	271.0	523 TRACKED ARMORED VEHICLES
REAGAN II	1985	250.0	629 MK-12 MODE 4 COMMERCIAL IFF SYSTEMS WITH SUPPORT FOR THREE YEARS
	1985	77.0	ADDITIONAL SPARE PARTS SUPPORT FOR U.S. ORIGIN EQUIPMENT
	1985	450.0	ADDITIONAL CONSTRUCTION FOR U.S. ARMY CORPS OF ENGINEERS

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1986	89.0	200 STINGER AIR DEFENSE MISSILE SYSTEMS WITH 600 MISSILES
	1986	107.0	100 AIR LAUNCHED HARPOONS
	1986	60.0	671 AIM-9L MISSILES
	1986	202.0	2263 TRUCKS, 1389 TRAILERS, AND 129 AMBULANCES
	1986	98.0	ADDITIONAL 995 AIM-9L MISSILES AND 30 TRAINING MISSILES
	1986	500.0	TECHNICAL SERVICES FOR F-15 AIRCRAFT
	1987	325.0	95 AN/ALQ-171 ECM SYSTEMS FOR F-5 AND F-15
	1987	400.0	12 UH-60 BLACKHAWK VIP HELOS, 15 BELL 406 HELOS WITH 7.62MM GUNS AND 2.75 ROCKET LAUNCHERS AND 1 C-12 AIRCRAFT
	1987	360.0	1600 AGM-64D MAVERICK MISSILES
	1988	400.0	ADDITIONAL 13 UH-60 BLACKHAWK HELOS AND 15 BELL 406 HELOS
	1988	375.0	MULTI-STAGE IMPROVEMENT PROGRAM FOR F-15 AIRCRAFT

TABLE 4.3 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
	1988	502.0	12 F15C/D REPLACEMENT AIRCRAFT
	1988	120.0	150 CONVERSION KITS FOR M60A3 TANK THERMAL SIGHT CONFIGURATION

Source: Compiled by author from U.S. Senate Proceeding, October 1, 1977 to September 30, 1988.

not include the conformal wing tanks to extend the range and was fitted with lesser capable models of the AIM-9F Sidewinder and AIM-7F Sparrow air-to-air missiles.

It was not until the Reagan Administration that the transfer of state-of-the-art weaponry became available. The proposed and subsequent sale and transfer of the E-3A AWACS aircraft in 1981 was and still is the very best in United States technology. This was followed by proposals for over 4,000 improved TOW missiles, and 101 (202 tanks) sets of conformal fuel tanks for the Saudi F-15's. The conformal tanks increase the F-15 range to reach any part of the entire Middle East.

The proposed high technology transfers continued in 1984 with an additional 2500 improved TOW missiles, 200 basic Stinger missile systems with 400 missiles, and a vast array of modern tracked combat vehicles.

In 1986 proposed construction contracts dropped to zero and proposals for arms leveled out to about $1 billion a year. The specific military equipment includes, an additional 200 Stinger missile systems with 600 missiles, 100 air-launched Harpoon missiles, 95 AN/ALQ-171 airborne Electronic Counter Measures equipment, and over 1500 upgraded models of the AIM-9L Sidewinder air-to-air missile.

From the perspective of the proposed United States arms sales or transfer listing in Table 4.3, Saudi Arabia is one of the best equipped military forces in the Middle East. However, the Saudis question the reliability of the United States as a supplier in the future because of the heated debates in Congress whenever a proposal is made in their behalf by the administration. This is evident due to the recent agreement with Great Britain to purchase the 72 Tornado fighter aircraft including an extensive spare parts and missile support clause. With this addition of military equipment Saudi Arabia has a very high capability when compared to many of their opposing ideological neighbors.

7. Is the Recipient a Major United States or Western Oil Supplier?

Saudi Arabia owns the largest known oil reserves in the world. One source estimates the total reserve to be 165 billion barrels, which is almost three times more that any other country in the world (Cordesman, p. 21). Other sources (Economist, pp. 19-20; Middle East Economic Digest, p. 42; New York Times, 10 Feb 1982) report that Saudi Arabia had proven

reserves of 110 billion barrels and additional probable reserves of 180 billion barrels. The added number of reserves comes from recent exploration in the empty quarter and northern areas. In any case, Saudi Arabia is the largest producer of crude oil in the entire Persian Gulf region. The United States has reduced its overall dependence on Gulf oil and now averages approximately 5% of its needs (Berkowitz, p. 198). The majority of Saudi oil goes to Western Europe, which includes Great Britain, West Germany, and France which when combined are moderate importers. Japan is considered a minor recipient of Saudi oil with imports less than 40% of total oil import needs.

8. How Strategically Important is the Recipient's Geographic Location?

Saudi Arabia is the center of the Middle East in geographic location, ideology and economic stability. Geographically in the sense that it is one of the largest Middle Eastern countries with an area of 830,000 square miles and with two of its coastline borders on the Persian Gulf and the Red Sea (Figure 4.3).

Bordering the Persian Gulf obviously states its importance to the world with regard to accessing oil. With its border on the Red Sea, it strategically borders the Suez Canal as one of the five keys to lock up the world (Till, p. 83). It is the ideological center of the Middle East because the Saudis are the Guardians of Islam. Mecca, the geographic heart and soul of Islam, is in Saudi Arabia and they have the

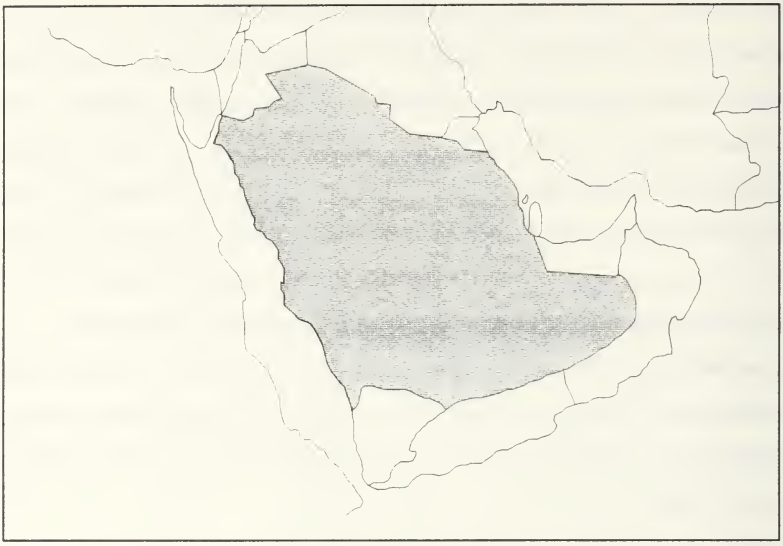


Figure 4.3 SAUDI ARABIA

responsibility of keeping Islam's holiest place safe and open for all Muslims to make the yearly pilgrimage. Economically, Saudi Arabia has the largest known oil reserves in the world and exports three times as much crude oil as its next competitor, the Soviet Union (Cordesman, p. 4).

The Saudi geostrategic importance is high because the Soviet Union exerts a high ideological influence and military arms support for Syria and South Yemen. These two countries are extremely important to the Soviet Union for establishing a presence in the area as well as port and repair facilities.

9. Were There Any Significant Events Affecting the Value of Access?

The significant events are as follows:

1) Arab-Israeli War in June 1967,

2) Withdrawal of Great Britain from the East of Suez and all Gulf Commitments in January 1968,

3) Military Assistance Agreement between South Yemen and the Soviet Union in August 1968,

4) Formation of Organization of Petroleum Exporting Countries in 1970,

5) Syria signed a Treaty of Friendship with the Soviet Union in April 1972,

6) Arab-Israeli War in October 1973,

7) Oil Crisis in 1973 that resulted in a three fold increase in oil prices,

8) Fall of the Shah of Iran in January 1979,

9) Oil Crisis in 1979 that resulted in another increase in oil prices,

10) The Soviet Union invades Afghanistan in December 1979,

11) Iraq invades Iran in September 1980,

12) Israeli invasion of Lebanon in June 1982,

13) United States agrees to re-flag and escort Kuwaiti oil tankers in the Persian Gulf in October 1987,

14) Cease-fire in the Iran-Iraq War in August 1988.

These events have affected the relationship with the United States both politically and economically. Saudi Arabia's role in the Middle East is very deliberate and yet very supportive of Islamic, primarily Sunni, countries and their causes. This puts them in an adversarial role with the United States with regard to Israel. On the other hand, the

United States has the best military equipment and support services and in order to preserve their own automony, they must deal with the United States.

10. Who is the Major Military Arms and Related Services Supplier to Adjacent Adversaries?

There are three countries that could pose a threat for Saudi Arabia in the future with regard to their regional and internal security. They are: Iran, Iraq and Syria. The Soviet union is the predominant supplier for both Iraq and Syria. Syria has a military letter of agreement with the Soviet Union, whereas Iraq buys the weapons from the Soviet Union strictly with a buyer-seller arrangement. Iran does not have any particular arms supplier. Table 4.4 is a comparison of major weapons system and proposed arms sale during the Carter administration and both Reagan administrations.

B. OMAN

1. Is the United States the Sole or Predominant Supplier of Military Arms?

The United States is not the sole or predominant supplier of military arms and related services for Oman. Until 1980, historica trends in actual arms transfers shows that Britain has been the major supplier of military equipment (Cordesman, p. 897). However, since 1980, Oman has made purchases from the United States and France. Additional purchases from these suppliers will cause the predominant arms sales trend to shift away from Britain. The reason for the shift is two-fold. First, Oman was openly seeking an

TABLE 4.4

COMPARISON OF MAJOR WEAPON SYSTEMS

ANTICIPATED THREAT			PROPOSED US ARMS SALE TO SAUDI ARABIA FOR DEFENSE	
COUNTRY	SYSTEM	SUPPLIER	SYSTEM	YEAR
Iran	11 RF-4E RECONN AIRCRAFT	USA	100 HARPOON MISSILES	1978
	SUPPORT FOR F-14 INCLUDING PHOENIX WEAPONS SYSTEM	USA	60 F-15 FIGHTER AIRCRAFT WITH SUPPORT INCLUDING TRAINERS, SPARE PARTS AND FIRE CONTROL SYSTEMS FOR AIM-9F AND AIM-7F MISSILES	1978 1979 1980 1981 1986 1988
	186 AIM-9H SIDEWINDER MISSILES	USA		
	24 SCUD-B LAUNCHER SSM MISSILE SYSTEM WITH 120 MISSILES	SYRIA	64 M60A1 TANKS	1979
	300 AIM-9L SIDEWINDER MISSILES	USA	4290 DRAGON ANTITANK MISSILES	1979
	300 HONG YING-5 PORTABLE SAM MISSILES	CHINA	6709 M220A1 TOW GUIDED MISSILE LAUNCHERS	1980 1982
	130 CSA-1 SAM MISSILES W/LAUNCHERS	CHINA	2849 AIM-9 SIDEWINDER MISSILES	1981-1988
SYRIA	95 MIG-23 FIGHTERS	USSR	4116 AGM-65A NAVERICK MISSILES	1984-1988
	20 MIG-25 FOXHOUND FIGHTERS	USSR	8 BOEING 707 AIRCRAFT WITH THREE YEARS SUPPORT	1981
	30 MIG-27 FIGHTERS	USSR		
	15 MIG-29 FIGHTERS	USSR	101 CONFORMAL FUEL TANKS FOR F-15	1981

TABLE 4.4 (CONTINUED)

	40 SA-8 MOBILE MISSILE SYSTEM	USSR	5 E-3A AWACS AIRCRAFT WITH SUPPORT AND INCONUS TRAINING FOR PILOTS	1981
	10 SA-11 MOBILE SAM MISSILE SYSTEM	USSR		
	432 SA-13 GOPHER MOBILE SAM SYSTEMS	USSR	400 STINGER MISSILE SYSTEMS WITH 800 MISSILES	1984
	225 SA-7 GRAIL PORTABLE SAM SYSTEMS	USSR	100 AIR LAUNCHED HARPOON MISSILES	1986
	150 AA-6 ACRID AIR TO AIR MISSILES	USSR	25 BLACKHAWK HELOS	1986 1987 1988
			95 AN/ALQ-171 ECM SYSTEMS	1987
	150 AA-7 APEX AIR TO AIR MISSILES	USSR		
	60 AA-8 APHID AIR TO AIR MISSILES	USSR		
	240 SA-9 GASKIN LAND MOBILE SAM MISSILES	USSR		
	320 SA-8 GECKO LAND MOBILE SAM MISSILES	USSR		
IRAQ	70 F-7 FIGHTER CHINESE VERSION OF MIG-21	EGYPT		
	113 MIRAGE F-1C	FRANCE		
	825 AMX-30 ROLAND MISSILES	FRANCE		
	60 SA-8 MOBILE SAM SYSTEMS	USSR		
	38 ASTROL-II SS-30 MULTIPLE ROCKET SYSTEMS	BRAZIL		

TABLE 4.4 (CONTINUED)

542 AM-39 EXOCET AIR TO SHIP MISSILES	FRANCE
200 AS-30L ANTI-SHIP MISSILES	FRANCE
500 SA-6 GAIN-FUL LAND MOBILE SAM	USSR POLAND
360 SA-8 GECKO LAND MOBILE SAM	USSR
200 SA-9 GASKIN LAND MOBILE SAM	USSR
500 T-59 MBT	USSR
600 T-72 MBT	USSR
400 T-69 MBT	CHINA

Sources: Equipment figures for Iran, Syria, and Iraq: SIPRI, pp. 249-266; Proposed Arms Sales for Saudi Arabia compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

alignment with the United States because of the threats that Iran and Yemen posed to the Sultanate (Cordesman, p. 897). With the cease-fire in the Iran-Iraq War and constructive talks with Yemen to settle border disputes, the trend may again shift. But as of September 1988, the Oman Sultanate had not made overtures to end the military arms and aid agreements.

The second reason that Oman chose to purchase military supplies from the United States was that the United States is willing to give military aid. Britain proposed to sell Oman advanced fighter aircraft, but had postponed delivery until 1991 because of a lack of funding (SIPRI, pp. 258-9). The United States, on the other hand, needed staging facilities for operations in the Persian Gulf. Therefore, an agreement was reached whereby Oman would provide a major United States staging facility at Al Misirah Island, in the Arabian Sea, and the United States would provide security assistance guarantees and military equipment. This arrangement has worked out very well for Oman and the United States and from this perspective there is no reason to believe that it will end in the near future.

2. What was the Total Dollar Amount of the 36b Congressional Notifications During the Carter and Reagan Administrations?

The total dollar amounts of proposed arms sales or transfers during the three administrations by fiscal year are shown in Table 4.5.

3. Did the Dollar Amount of the 36b Congressional Notifications Increase or Decrease During the Carter and Reagan Administrations?

Figure 4.4 contrasts the proposed arms sales or transfers to Oman compared to the amount of proposals to the Persian Gulf by fiscal year.

Figure 4.4 shows the small amount of proposed arms sales to Oman when compared to the rest of the Persian Gulf.

TABLE 4.5

TOTAL PROPOSED ARMS SALES OR TRANSFERS FOR OMAN
(in millions of Dollars)

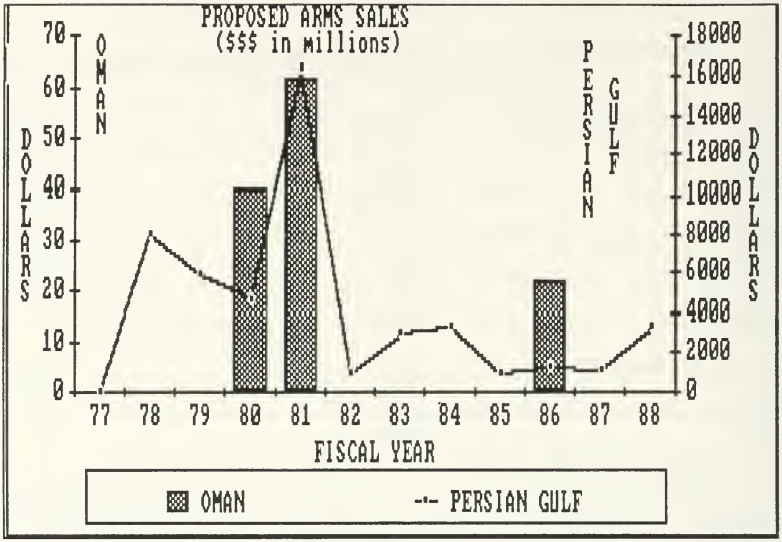
Administration	Fiscal Year	Amount
Carter	1978	$ 0
	1979	0
	1980	40.1
Reagan I	1981	62.0
	1982	0
	1983	0
	1984	0
Reagan II	1985	0
	1986	22.0
	1987	0
	1988	0
GRAND TOTAL		$124.0

Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

It shows an increase in proposed arms sales in the transition from the Carter to the beginning of the first Reagan Administration. Then a marked decrease from the first Reagan Administration through the second Reagan administration.

4. What are the Anticipated Payment Terms?

Oman has not relied on the Military Assistance Program (MAP) for any major expenditure of military equipment or services (DSAA, p. 60). Instead, Oman has extensively used on the Foreign Military Sales Financing Program and has spread out it purchases of military arms and services with $49.1 million in DOD direct loans and $150 million in DOD guaranty loans (DSAA p. 24). The use of financing has been necessary



Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 4.4 Proposed Arms Sales for Oman versus Persian Gulf

because of an average deficit of $350 million that Oman has incurred since 1982 (EIU, p. 21). Based on the decline in the deficit in 1987 to $248 million due to a reduction in overall government expenditures, Oman is making progress in reversing this trend. When their reserves are restored to pre-1980 levels, Oman may not have to rely on financing.

5. What is the Quantity of Proposed Arms Transfers?

The quantity of United States proposed military arms and related services to Oman has been negligible. There has been no military construction that falls under the 36b

Notification requirement. Table 4.6 shows the proposed arms sales or transfers fall in the category of Arms and support under the 36b Notification requirement.

TABLE 4.6

PROPOSED ARMS SALES TO OMAN
(in millions of Dollars)

Administration	Fiscal Year	Amount	Equipment
Carter	1980	$ 24.8	1 C-130H AIRCRAFT WITH SUPPORT
Carter	1980	$ 15.3	250 AIM-9P MISSILES
Reagan I	1981	$ 62.0	3 C-130H AIRCRAFT
Reagan II	1986	$ 22.0	300 AIM-9P MISSILES

Source: Compiled by author from U.S. Senate Proceedings from October 1, 1977 to September 30, 1988.

6. What was the Quality of the Proposed Arms Transfers?

The arms sales or transfer proposals to Oman in absolute terms is low for the Carter administration and both Reagan administrations.

In the Carter administration there were two proposed sales consisting of one C-130H Hercules cargo aircraft, including maintenance support, spare parts and two years training for the crew. In addition there was a proposed sale of 250 AIM-9P Sidewinder air-to-air missiles to arm the

British made Jaguar and Hunter jet fighters. In this instance, a proposal to sell one cargo plane and a small number of air-to-air missiles is considered low in absolute and regional terms.

The arms proposals during both Reagan administrations did not substantially change. In the first Reagan administration there were two proposals to sell an additional three c-130H Hercules aircraft, with no mention of support, spare parts, or training. In the second Reagan administration there was one proposal to sell 300 AIM-9P Sidewinder air-to-air missiles. Proposed sale of military equipment of this nature is also considered low in absolute and regional terms.

When appraising the threats to Oman from Iran and Yemen, the quantity and quality of the proposed arms sales from the United States is considered is minimal. They will not increase Oman's military capability enough to consider them on a military par with any neighboring states.

7. Is the Recipient a Major United States or Western Oil Supplier?

Sources vary on the estimates of the total oil reserves in Oman. One estimate, as of 1982, shows reserves of 2.7 billion barrels (Cordesman p. 21). A more recent source shows a total reserve of 3.96 billion barrels as of 1986 (EIU p. 22). The significance of this report is that for the first time in ten years the increase in proven reserves was less that the volume of production for that year.

The United States does not regularly import any oil from the 600,000 barrel per day production of oil in Oman. Table 4.7 shows the top six oil recipient nations for 1986.

TABLE 4.7

AVERAGE OF OIL EXPORTS BY OMAN THROUGH 1986

COUNTRY	PERCENTAGE
Japan	53.4%
South Korea	16.9%
India	7.5%
Thailand	6.5%
France	3.2%

Source: "The Economist Intelligence Unit," 4th Quarter 1987, pp. 23-24.

8. How Strategically Important is the Recipient's Geographic Location?

Oman has about 212,400 square kilometers of territory, 1,384 kilometers of land boundaries, and 2,092 kilometers of coastline (Cordesman, p. 606). Its geographic location gives the Sultanate control of the Musandam Peninsula and the main shipping channels at the Strait of Hormuz (Figure 4.5).

With severed diplomatic relations between Iran and the United States, strategic access to Oman is critical. Oman's strategic importance to the United States has increased significantly with the agreement to open an over-the-horizon staging point for Gulf and Indian Ocean operations at Al Masirah Island. Al Masirah is 2000 miles closer to the Persian Gulf than Diego Garcia, and helps both Oman and the



Figure 4.5 Oman

United States maintain a low profile to avoid criticism from the more radical middle eastern states.

9. Were There Any Significant Events Affecting the Value of Access?

The significant events are as follows:

1) Arab-Israeli War in June 1967,

2) Withdrawal of Great Britain from the East of Suez and all Gulf Commitments in January 1968,

3) Military Assistance Agreement between South Yemen and the Soviet Union in August 1968,

4) Formation of Organization of Petroleum Exporting Countries in 1970,

5) Syria signs a Treaty of Friendship with the Soviet Union in April 1972,

6) Arab-Israeli War in October 1973,

7) Oil Crisis in 1973 that resulted in a three fold increase in oil prices,

8) Fall of the Shah of Iran in January 1979,

9) Oil Crisis in 1979 that resulted in another increase in oil prices,

10) The Soviet Union invades Afghanistan in December 1979,

11) Iraq invades Iran in September 1980,

12) Israeli invasion of Lebanon in June 1982,

13) United States agrees to re-flag and escort Kuwaiti oil tankers in the Persian Gulf in October 1987,

14) Soviet Union set up a temporary office in Muscat in October 1987,

15) Cease-fire in the Iran-Iraq War in August 1988.

These events carry some of the same ramifications for the United States that they did for Saudi Arabia. The difference is that Oman sought to build a low-key alliance with the United States for insurance against Iran by allowing U.S. Naval Forces to use Al Masirah Island as a staging point.

10. Who is the Major Military and Related Services Supplier to Adjacent Adversaries?

There are two countries that possibly pose problems for Oman in the future with regard to their regional and internal security. They are Iran and South Yemen. Iran has no particular arms supplier and the War with Iraq has severely depleted their military stocks. Nonetheless, the ideological differences and close proximity at the Strait of Hormuz make Iran a major internal threat. Table 4.8 is a listing of the military equipment of Iran.

South Yemen has a full economic and military agreement with the Soviet Union (Turnbull, pp. 110-121). Border clashes are a common occurrence, but in September 1988, Oman and South Yemen have met to settle the border issues. Regardless of these meeting South Yemen will remain a primary regional threat with a large contingent of Soviet military assistance teams and Cubans soldiers.

TABLE 4.8

MAJOR ADVERSARY'S MILITARY EQUIPMENT

COUNTRY	SYSTEM	SUPPLIER
IRAN	11 RF-4E RECONN AIRCRAFT	USA
	FOR F-14 INCLUDING PHOENIX WEAPONS SYSTEM	USA
	186 AIM-9H MISSILES	USA
	24 SCUD-B LAUNCHER SSM MISSILE SYSTEM WITH 120 MISSILES	SYRIA
	300 AIM-9L MISSILES	USA
	300 HONG YING-5 PORTABLE SAM MISSILES	CHINA
	130 CSA-1 SAM MISSILES WITH LAUNCHERS	CHINA

Source: Equipment figures for Iran from SIPRI, pp. 249-266.

C. UNITED ARAB EMIRATES

1. Is the United States the Sole or Predominant Supplier of Military Arms?

The United States is not the predominant supplier of military arms and related services for the United Arab Emirates (UAE). Britain is the predominant supplier of all military arms and construction for the UAE. France and the United States sporadically supply some military materials. When compared to Britain, their contribution is negligible (SIPRI, p. 268). An example is, in March 1988 the UAE signed an agreement with Britain for design and construction of a modern naval base at an estimated cost at $1 billion (EIU, p. 12).

2. What was the Total Dollar Amount of the 36b Congressional Notifications During the Carter and Reagan Administrations?

There were no 36b Congressional Notifications for proposed arms sales or transfers during the Carter administration. The total dollar amounts of proposed arms sales or transfers for both Reagan administrations by fiscal year are shown in Table 4.9.

3. Did the Dollar Amount of the 36b Congressional Notification Increase or Decrease During the Carter and Reagan Administrations?

There were no 36b Congressional Notifications for proposed arms sales or transfers during the Carter Administration. Figure 3.6 contrasts the proposed arms sales or transfers to the UAE compared to the amount of proposals to th Persian Gulf by fiscal year.

TABLE 4.9

TOTAL PROPOSED ARMS SALES OR TRANSFERS FOR UAE
(in millions of Dollars)

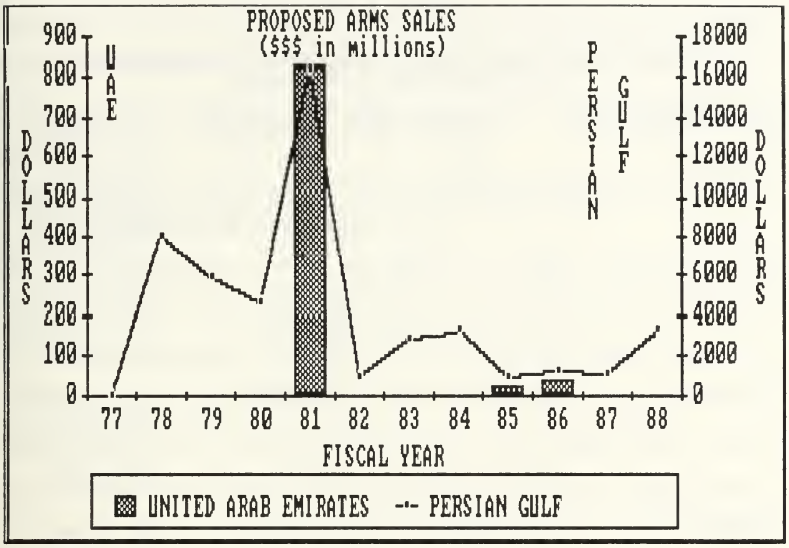
Administration	Fiscal Year	Amount
Reagan I	1981	$ 828
	1982	0
	1983	0
	1984	0
Reagan II	1985	21
	1986	40
	1987	0
	1988	0
GRAND TOTAL		$ 889

Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 4.6 shows that the proposed sales of military arms and services to UAE exhibits no graphic pattern. There was an immediate increase of proposed sales in the first Reagan Administration. The second Reagan Administration shows a prompt decline. The increase in 1981 is attributed to the arms proposal for seven Improved Hawk batteries with 343 Hawk Missiles for general self defense. The proposed sale in 1985 for $21 million was for follow-on equipment related to the original I-Hawk sale in 1981.

4. What are the Anticipated Payment Terms?

The United Arab Emirates have not relied on the United States Military Assistance Program or the Foreign Military Sales Financing Program for any major expenditure of military



Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 4.6 Proposed Arms Sales for United Arab Emirates versus Persian Gulf

equipment or services. This is because of the ability to pay due to large reserves of funds from oil receipts.

5. What is the Quantity of Proposed Arms Transfers?

The quantity of United States proposed military arms sales to the UAE for fiscal year 1981 was moderate at $828 million. The other two proposed sales, fiscal years 1985 and 1986, are considered negligible. Table 4.10 show the 36b Congressional Notifications for the United Arab Emirates.

TABLE 4.10

PROPOSED ARMS SALES TO THE UNITED ARAB EMIRATES
(in millions of Dollars)

Administration	Fiscal Year	Amount	Equipment
Reagan I	1981	$ 28	54 JEEP-MOUNTED TOW LAUNCHERS WITH 1085 IMPROVED-TOW HEAT MISSILES AND 101 PRACTICE MISSILES
Reagan I	1981	$800	7 IMPROVED-HAWK BATTERIES WITH 343 HAWK MISSILES
Reagan II	1985	$ 21	45 HAWK MISSILES
Reagan II	1986	$ 40	8 DIGITAL TROPOSCATTER RADIO SYSTEMS

Source: Compiled by author from Senate Proceedings, October 01, 1977 to September 30, 1988.

6. What was the quality of the proposed arms transfer?

The proposed arms sales to the UAE in an absolute context is considered low. The proposed sale of jeep-mounted TOW launchers with 1085 Improved-TOW heart seeker missiles and Improved-Hawk batteries with 388 Hawk missiles is similar to equipment that can be purchased from a number of suppliers. In a regional confrontation this type of military equipment is excellent for self-defense. It would not be considered the

type of military hardware that could be used in an offensive situation unless coupled with other more technical weaponry. Therefore in absolute and regional terms, the proposed arms sales are low.

7. Is the Recipient a Major United States or Western Oil Supplier?

The United Arab Emirates is made up of a loose federation of seven independent or "Trucial States." The UAE is centered around the wealthiest and largest, Abu Dhabi. Abu Dhabi also has approximately 90% of the oil reserves of the UAE. Dubai, the second largest has the remaining reserves. As of 1982 the United Arab Emirates has an estimated oil reserve of 32.4 billion barrels (Cordesman, p. 21). Japan is the principle recipient of UAE oil, and in all likelihood will continue this business arrangement. In fact, Japan has reduced its dependence on Gulf oil, but continues to purchase over half of the oil produced by the UAE (EIU, p. 9). For example, oil exports to Japan in the first nine months of 1987 totaled $3.8 billion (EIU, p. 9). Table 4.11 shows the top oil recipients for the first quarter of 1988.

8. How Strategically Important is the Recipient's Geographic Location?

The United Arab Emirates has 82,880 square kilometers of territory. Its strategic importance lies in the amount of oil reserves in the two largest Emirates and the two water boundaries; one in the Gulf of Oman at the entrance of the Strait of Hormuz and the other with approximately 300 hundred

TABLE 4.11

AVERAGE OF OIL EXPORTS BY UAE THROUGH 1988

Country	Percentage
Japan	49.4%
Singapore	3.9%
United States	3.7%
France	3.2%
Oman	2.7%
South Korea	1.7%
The remaining 35.4% is held in reserve	

Source: "Economist Intelligence Unit", 1st Quarter 1988, p.2.

miles of coastline inside the Persian Gulf. Since its founding in 1971 the Emirates have notoriously squabbled over territorial rights, and normally do not cooperate with other OPEC member in reducing production. The UAE is the most unstable internally and Saudi Arabia and Kuwait help to keep it stable. If it became anti-Western it would not necessarily be a threat the United States strategic access to other Gulf States.

9. Were There any Significant Events Affecting the Value of Access?

The significant events are a follows:

1) Discovery of large oil reserves in Abu Dhabi in 1959 and in Dubai in 1966,

2) Withdrawal of Britain from all Gulf Commitments in January 1968,

3) Formation of Organization of Petroleum Exporting Countries in 1970,

4) Oil Crisis in 1973 that resulted in a three fold increase in oil prices,

5) Fall of the Shah of Iran in January 1979,

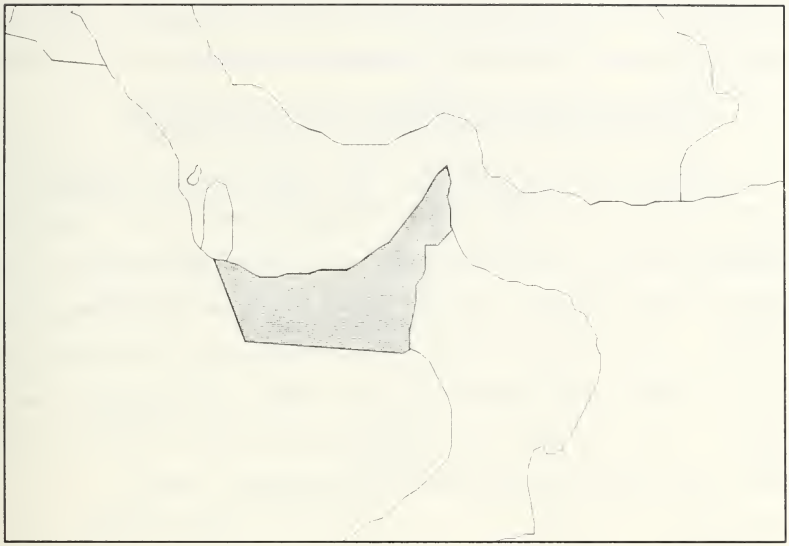


Figure 4.7 United Arab Emirates

6) Oil Crisis in 1979 that resulted in another increase in oil prices,

7) Iraq invades Iran in September 1980, and the UAE announces its support for Iraq,

8) United States agrees to re-flag and escort Kuwaiti oil tankers in the Persian Gulf in October 1987.

9) Cease-fire in the IRan-Iraq War in August 1988.

These events did not have the same affect on the relationship with the UAE and the United States that it did with other Persian Gulf states. The UAE tries to maintain an neutral posture on almost every issue due to the constant pressure from both Saudi Arabia and Iran. The ceasefire of the Iran-Iraq War relieved some of that pressure, but the

Emirates still have to deal with the Saudi stance to maintain their position in the Gulf Cooperation Council.

10. Who is the Major Military Arms and Related Services Supplier to Adjacent Adversaries?

Most of the threat to the United Arab Emirates is internal, that is, between the Emirates themselves. The only outside adversary that could be a problem is Iran and they do not have the financial backing needed nor a dedicated supplier of arms. In the past Saudi Arabia had many confrontations with the UAE over boundaries, but most of those have been settled. Saudi Arabia still looks at the UAE to fall in line with their stance on political and economic issues.

D. BAHRAIN

1. Is the United States the Sole or Predominant Supplier of Military Arms?

The United States is not the sole or predominant supplier of military arms for Bahrain. Britain was the sole supplier until their withdrawal from the Gulf in 1968. Since then Bahrain has not depended on any one Western country for military equipment, but has aligned with Saudi Arabia for military protection. This is not to say that Bahrain does not make independent buys. Since 1982, the United States, France and West Germany have all sold military equipment to Bahrain.

2. What was the Total Dollar Amount of 36b Congressional Notifications During the Carter and Reagan Administrations?

There were no 36b Congressional Notifications during the Carter Administration. The total dollar amounts of

proposed arms sales or transfers during the two Reagan Administrations by fiscal year are as shown in Table 4.12:

TABLE 4.12

TOTAL PROPOSED ARMS SALES OR TRANSFERS FOR BAHRAIN
(in millions of Dollars)

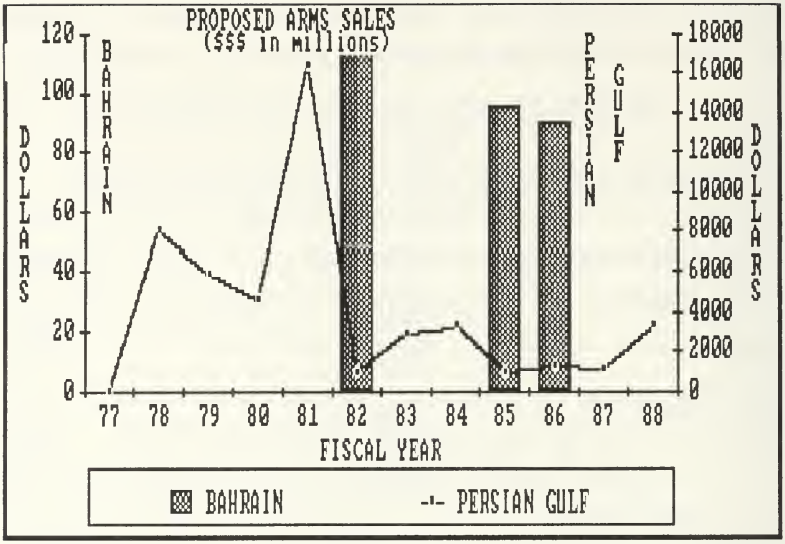
Administration	Fiscal Year	Amount
Reagan I	1981	$ 0
	1982	114
	1983	0
	1984	0
Reagan II	1985	92
	1986	90
	1987	0
	1988	0
GRAND TOTAL		$ 296

Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

3. Did the Dollar Amount of the 36b Congressional Notifications Increase or Decrease During the Carter and Reagan Administrations?

There were no 36b Congressional Notifications during the Carter Administration. Figure 4.8 contrasts the proposed arms sales or transfers to Bahrain compared to the amount of proposals to the Persian Gulf by fiscal year during both of the Reagan Administrations.

Figure 4.8 shows a marked increase in proposed arms sales during the first Reagan Administration of $114 million. In the second Reagan Administration there were more proposed arms sales but it does show a decrease in the amount.



Source: Compiled by author from Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 4.8 Proposed Arms Sales for Bahrain versus Perisan Gulf

4. What are the Anticipated Payment Terms?

Bahrain has not relied on the Military Assistance Program (MAP) or the Foreign Military Sales Financing Program for any major expenditure of military equipment or services from the United States. Bahrain has consistently paid cash for all transactions involving military arms and services (DSAA, pp. 24,60). In fact it has had no foreign debt at all since 1985 (EIU, p. 2). Bahrain lacks the large oil reserves of the other Gulf States, but makes up the difference with joint ventures with Saudi Arabia in marketing aluminum smelter

products, merchant banking, and a steady but low production of their oil reserves. Bahrain's alignment with Saudi Arabia promotes the desire for a "no political strings attached" philosophy when buying military equipment. There is no reason to believe that this policy will change.

5. What is the Quantity of Proposed Arms Transfers?

The quantity of United States proposed military arms and related services to Bahrain has been small to negligible. Table 4.13 shows the dollar amount and type equipment of the proposed sales during both Reagan Administrations.

TABLE 4.13

PROPOSED ARMS SALES TO BAHRAIN
(in millions of Dollars)

Administration	Fiscal Year	Amount	Equipment
Reagan I	1982	$114	2 F-5F Aircraft 4 F-5E Aircraft 60 AIM-9P Missiles
Reagan II	1985	$ 92	6 F-5E/F Aircraft 15 J-85 Engines
Reagan II	1986	$ 90	54 M60A3 Tanks

Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

6. What was the Quality of the Proposed Arms Transfers?

The arms sales or transfer proposals to Bahrain in absolute terms is low because of the age and sophistication of the F-5 jet fighter. The fighter by itself is considered

moderate, but the small number of this type of aircraft coupled with a proposed purchase of only 60 AIM-9P Sidewinder air-to-air missiles is unimpressive. In addition this particular type of air offense and defense capability could be purchased from any number of military arms suppliers. Because of the size and location of Bahrain, the military forces are small and are for defense only. In absolute and regional terms their potential is low in both cases.

A related factor that might upgrade the regional capability of Bahrain is their military alignment with Saudi Arabia for protection (Cordesman, p. 583). For example, the proposed arms sale in 1982 of the F-5E jet aircraft was a part of a package deal to give Bahrain the ability to take part in a joint the air defense system with Saudi Arabia's AWACS buy (Cordesman p. 584).

7. Is the Recipient a Major United States or Western Oil Supplier?

Bahrain has the least amount of known oil reserves in all of the Gulf states. Seismic estimates in 1982 show Bahrain's estimated probable oil reserves is .2 billion barrels. Since Bahrain is an island state made up of 32 islands and therefore has limited territory, their oil industry is fading. (Cordesman p. 21). Because of this natural depletion, Bahrain has limited their output of oil to 42,000 barrels per day (Cordesman, p. 583). This provides a predictable income for budgeting. Table 4.14 shows the major recipients of oil exported by Bahrain.

TABLE 4.14

AVERAGE OF OIL EXPORTS BY BAHRAIN THROUGH 1986

Country	Percentage of total
Japan	16.6
United States	14.6
Saudi Arabia	13.9
Netherlands	9.7
India	5.8
Pakistan	3.9
Kuwait	3.1

The remaining 32.4 percent is held in reserve.

Source: "Economist Intelligence Unit," Report No. 4-1987, p.2.

Table 4.14 shows that the United States is a small recipient whereas the other Western countries are moderate importers of Bahrain oil.

8. How Strategically Important is the Recipient's Geographic Location?

Bahrain is an island nations consisting of one big island and 32 smaller islands in the Persian Gulf off the coast of Saudi Arabia. Because of the lack of independent oil reserves and territorial limits Bahrain is unable to provide for its own defense. It is tied economically and militarily to Saudi Arabia and since the construction of the causeway from the main island to Saudi Arabia, it is tied physically (Figure 4.9).

For the United States Bahrain's strategic access is critical to the standing Mid-East Task Force. Bahrain draws some protection from its tenuous status as the informal "home

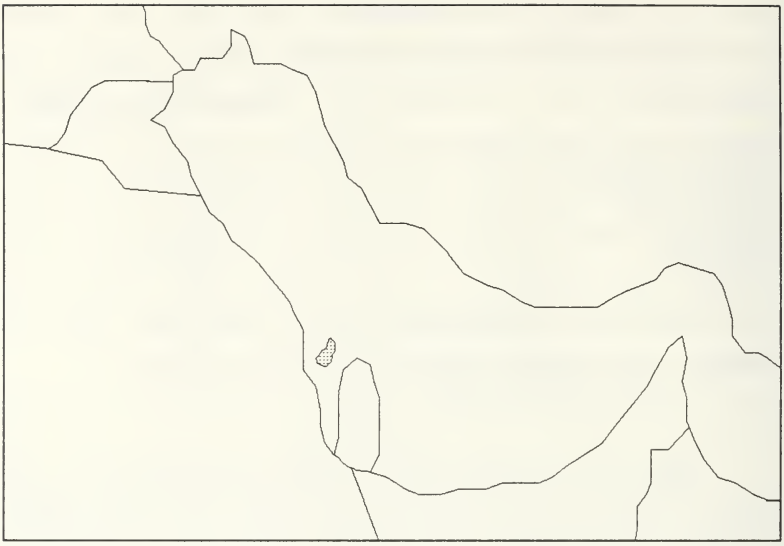


Figure 4.9 Bahrain

port" for the five ships of the U.S, Mid-East Task Force (Cordesman, p. 583). Following the withdrawal of Britain from the Gulf in 1968, the United States was offered use of the base facilities for a reported $4 million per year. The agreement was publicly cancelled because of United States support to Israel in the 1973 October War, but neither Bahrain nor Saudi Arabia objects to U.S. naval ships conducting business as usual. In addition the United States has not cancelled nor altered the original payment. Bahrain is considered high in strategic importance.

9. Were There any Significant Events Affecting the Value of Access?

The significant events are as follows:

1) Arab-Israeli War in June 1967,

2) Withdrawal of Great Britain from the East of Suez and all Gulf Commitments in January 1968. The United States agrees to rent the existing British facility for $4 million per year,

3) Formation of Organization of Petroleum Exporting Countries in 1970,

4) Arab-Israeli War in October 1973. Cancels agreement with the United States of port facility for U.S. Mid-East Task Force.

5) Oil Crisis in 1973 that resulted in a three fold increase in oil prices,

6) Fall of the Shah of Iran in January 1979,

7) Oil Crisis in 1979 that resulted in another increase in oil prices,

8) The Soviet Union invades Afghanistan in December 1979,

9) Iraq invades Iran in September 1980,

10) Israeli invasion of Lebanon in June 1982,

11) United States agrees to re-flag and escort Kuwaiti oil tankers in the Persian Gulf in October 1987,

12) Cease-fire in the Iran-Iraq War in August 1988.

Bahrain will align with Saudi Arabia on almost any economic of political issue. Therefore the effect of significant events are the same.

10. Who is the Major Military Arms and Related Services Supplier to Adjacent Adversaries?

There is one country that possibly could pose a threat for Bahrain in the future with regard to their internal security and that is Iran. The threat is ideological rather

than military. Bahrain's population is 60% Shiite Muslim with the same basic religious beliefs as Iran. Table 4.15 is a listing of the major weapon systems of Iran.

TABLE 4.15

MAJOR ADVERSARY'S MILITARY EQUIPMENT

COUNTRY	SYSTEM	SUPPLIER
IRAN	11 RF-4E RECONN AIRCRAFT	USA
	FOR F-14 INCLUDING PHOENIX WEAPONS SYSTEM	USA
	186 AIM-9H MISSILES	USA
	24 SCUD-B LAUNCHER SSM MISSILE SYSTEM WITH 120 MISSILES	SYRIA
	300 AIM-9L MISSILES	USA
	300 HONG YING-5 PORTABLE SAM MISSILES	CHINA
	130 CSA-1 SAM MISSILES WITH LAUNCHERS	CHINA

Source: Equipment figures for Iran from SIPRI, pp. 249-266.

E. KUWAIT

1. Is the United States the Sole or Predominant Supplier of Military Arms?

The United States was not the sole or predominant supplier of military arms to Kuwait until 1988. Kuwait's annual military purchases from 1977 to 1988 averaged approximately $400 million. The majority of these purchases were

from France (SIPRI, p. 255; Cordesman, pp. 570-571). Other sporadic suppliers were the United States, Soviet Union and Britain. In 1988, Kuwait proposed a major buy of $1.9 billion with raised the United States to the predominant supplier status.

2. What was the Total Dollar Amount of the 36b Congressional Notifications During the Carter and Reagan Administrations?

The total dollar amount of proposed arms sales and transfers during the three administrations by fiscal are as shown in Table 4.16.

TABLE 4.16

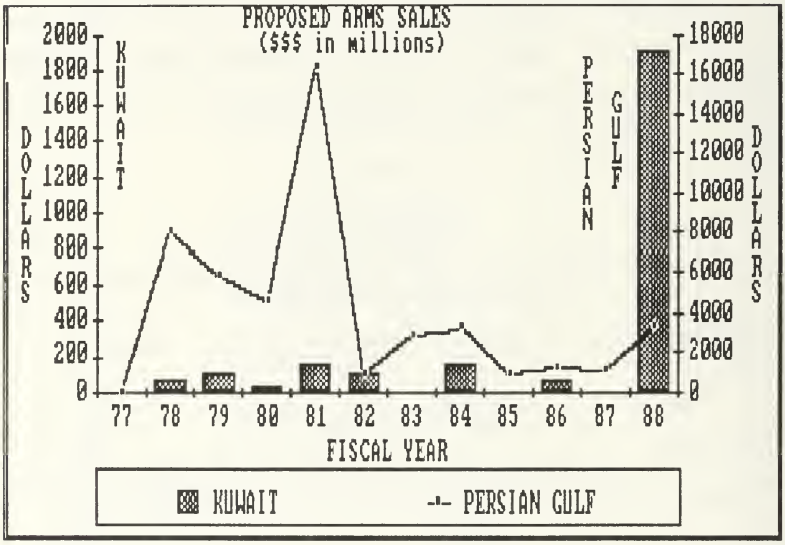
TOTAL PROPOSED ARMS SALES OR TRANSFERS FOR KUWAIT
(in millions of Dollars)

Administration	Fiscal Year	Amount
Carter	1978	$ 57.6
	1979	107.3
	1980	24.0
SUB-TOTAL		$ 188.9
Reagan I	1981	$ 150.0
	1982	97.0
	1983	0.0
	1984	160.0
SUB-TOTAL		$ 407.0
Reagan II	1985	$ 0.0
	1986	70.0
	1987	0.0
	1988	1,900.0
SUB-TOTAL		$1,970.0
GRAND TOTAL		$2,565.9

Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

3. Did the Dollar Amount of the 36b Congressional Notifications Increase or Decrease During the Carter and Reagan Administrations?

Figure 4.10 contrasts the proposed arms sales or transfers to Kuwait compared to the amount of proposals to the Persian Gulf by fiscal year.



Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 4.10 Proposed Arms Sales for Kuwait versus Persian Gulf

Figure 4.10 shows a slight increase of proposed arms sale during the Carter Administration. The first Reagan Administration shows a small increase and the appearance of a steady proposal each year. In 1988 an arms proposal for $1.9

billion for a state-of-the-art F/A-18C fighter aircraft with associated weaponry was submitted. Compared to proposed sales to Kuwait over the past ten years this substantial increase is a dynamic shift away from France as the predominant military equipment supplier.

4. What are the Anticipated Payment Terms?

Kuwait has not relied on the Military Assistance Program (MAP) or the Foreign Military sales financing Program for any major expenditure of military equipment or services from the United States (DSAA, pp. 24,60). In fact, Kuwait was the first Gulf state to realize the potential of having oil incomes that vastly exceeded it immediate needs and therefore is prepared to pay cash for all purchases including all major military equipment and services (Cordesman, p. 569). There is no reason to believe that their cash policy will change.

5. What is the Quantity of Proposed Arms Transfers?

The quantity of United States proposed military arms to Kuwait during the Carter Administration was negligible. The proposed arms sale in fiscal year of $57.6 million is unknown, because the 36b Congressional Notification was classified.

The quantity of proposed sales increased to small during the first Reagan Administration and progressed further to high in the second Reagan Administration. The reason for the high category was the proposed sale of $1.9 billion in

fiscal year 1988. Table 4.17 separates the individual 36b Congressional Notifications by amount and equipment.

6. What was the Quality of the Proposed Arms Transfer?

The arms sales or transfer proposals to Kuwait during the Carter Administration in absolute terms is low and in regional terms is considered moderate. The proposed sales during the Carter Administration and the first Reagan Administration consisted of the newer models of the Hawk Missile and a missiles minder guidance radar with technical assistance for two years. This type of air defense equipment can provide an adequate defense against any of the regional adversaries, but the capability of this military equipment would be stretched to it technological limits in an absolute sense.

In the last year of the second Reagan Administration a proposed transfer for state-of-the-art weaponry was submitted to the Senate. The proposal and subsequent approval (in October 1988) of a sale and transfer of 40 F/A-18C Fighter aircraft represents a transfer of the very best in quality aircraft technology. Yet, the associated weaponry that is included in the proposal is only moderate in quality. Both types of air-to-air missiles that were offered are of 1960-1970's technology.

With 40 F/A-18C jet aircraft added to Kuwait's current air force capability, it is formidable as a regional and absolute air power. The other armed services have not fared as well in their military equipment and cannot provide any

TABLE 4.17

PROPOSED ARMS SALES OR TRANSFERS TO KUWAIT
(in millions of Dollars)

Administration	Fiscal Year	Amount	Equipment
Carter	1978	$ 57.6	UNKNOWN
Carter	1979	$ 11.1	20 TOW LAUNCHERS WITH 1350 MISSILES
Carter	1979	$ 96.2	32 IMPROVED-HAWK MISSILES AND 1 AN/TPS-32 MISSILE RADAR
Carter	1980	$ 24.0	52 ARMORED PERSONNEL CARRIERS WITH INFRARED NIGHT SIGHTS AND 4840 TOW MISSILES
Reagan I	1981	$ 150.0	60 IMPROVED-HAWK MISSILES AND SUPPORT FOR TWO YEARS
Reagan I	1982	$ 97.0	56 IMPROVED-TOW VEHICLES, 16 APC, 56 INFRARED NIGHTS SIGHTS, AND 4840 IMPROVED-TOW MISSILES
Reagan I	1984	$ 82.0	MOD KITS FOR IMPROVED-HAWK MISSILE AND RADAR SYSTEMS

TABLE 4.17 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
Reagan I	1984	$ 78.0	PILOT TRAINING FOR 150 TRAINEES
Reagan II	1986	$ 70.0	685 5-TON TRUCKS
Reagan II	1988	$1,900	40 F/A-18C AIRCRAFT WITH 200 CLUSTER BOMB UNITS, 120 AIM-9L MISSILES, 200 AIM-7F MISSILES, 40 HARPOON MISSILES, AND 300 MAVERICK MISSILES

Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

defense (Cordesman, p. 576). Even if the rest of the Kuwaiti armed forces had an equal amount of modern weaponry, the size and location of the country makes it strategically vulnerable to two of it neighbor, Iraq and Iran. Therefore as an absolute and regional power Kuwait is considered moderate.

7. Is the Recipient a Major United States or Western Oil Supplier?

Kuwait owns the second largest known oil reserves in the world. A 1982 estimate shows Kuwait with 67.2 billion barrels of reserve oil (Cordesman, p. 21). Table 4.18 show the top three oil recipients of Kuwaiti oil.

TABLE 4.18

AVERAGE OF OIL EXPORTS BY KUWAIT THROUGH 1984

Country	Percentage
Japan	28.5%
Western Europe	22.0%
United States	21.5%

The remaining 28% is held in reserve

Source: Adapted from Cordesman, The Gulf and the Search for Strategic Stability, 1984, p. 543.

8. How Strategically Important is the Recipient's Geographic Location?

Kuwait is wedged between the three largest and most influential Gulf states. They are Iraq, Iran and Saudi Arabia (Figure 4.11).

Kuwait has five large refineries and loading facilities on the Persian Gulf, and because of its small size, all of these facilities are close together. Being so close to Iraq and Iran, it is unclear that its oil facilities can be militarily defended (Cordesman, p. 545).

Until 1987 the defense of Kuwait depended on a warning from Saudi AWACS patrol aircraft. In 1987, the Kuwaiti government asked the United States to re-flag 11 of its oil tankers and provide escort and protection for them in the Persian Gulf. This agreement has not been cancelled even though there has been a cease fire in the Iran-Iraq War since August 1988. With the proposed sale of the F/A-18C Fighter

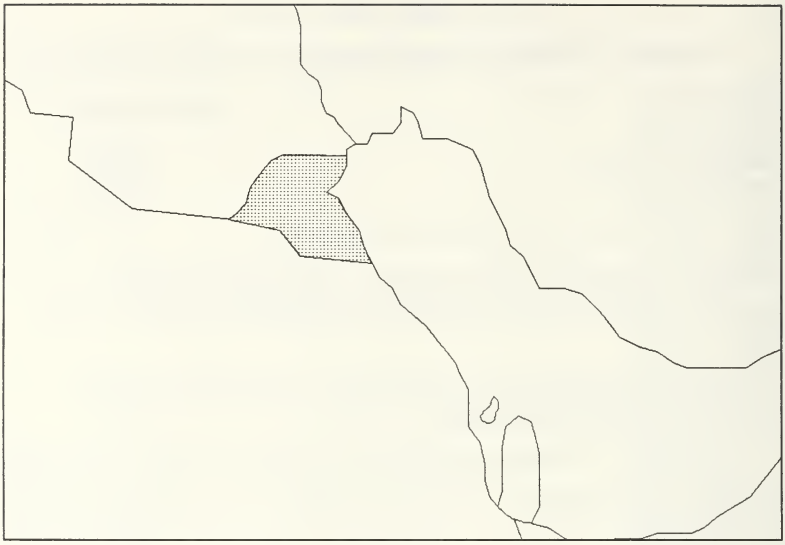


Figure 4.11 Kuwait

aircraft, it is postulated that the United States will continue to provide protection to Kuwait.

Kuwait's strategic importance is based on the enormous oil reserves and its close proximity to Iraq and Iran. Therefore it is considered high in strategic importance to the United States.

9. Were There Any Significant Events Affecting the Value of Access?

The significant events are as follows:

1) Arab-Israeli War in June 1967,

2) Withdrawal of Great Britain from the East of Suez and all Gulf Commitments in January 1968,

3) Formation of Organization of Petroleum Exporting Countries in 1970,

4) Arab-Israeli War in October 1973,

5) Oil Crisis in 1973 that resulted in a three fold increase in oil prices,

6) Fall of the Shah of Iran in January 1979,

7) Oil Crisis in 1979 that resulted in another increase in oil prices,

8) The Soviet Union invades Afghanistan in December 1979,

9) Iraq invades Iran in September 1980,

10) Iran launches air attacks to make Kuwait reduce its support to Iraq in the War in 1981,

11) Israeli invasion of Lebanon in June 1982,

12) United States agrees to re-flag and escort Kuwaiti oil tankers in the Persian Gulf in October 1987,

13) Ceasefire in the Iran-Iraq War in August 1988.

Kuwait strongly supports the position(s) that are espoused by Saudi Arabia. Kuwait's tenuous strategic position and common political and economic philsophies, as well as religious convictions, make for a harmonious partnership.

10. Who is the Major Military Arms and Related Services Supplier to Adjacent Adversaries?

There are two countries that possibly could pose a threat for Kuwait in the future with regard to their regional and internal security. They are Iran and Iraq. The Soviet Union is the predominant supplier for Iraq. Iran does not have any particular supplier. Table 4.19 us a listing of major weapons systems of these two possible adversaries.

TABLE 4.19

MAJOR ADVERSARY'S MILITARY EQUIPMENT

Country	System	Supplier
IRAN	11 RF-4E RECONN AIRCRAFT	USA
	FOR F-14 INCLUDING PHOENIX WEAPONS SYSTEM	USA
	186 AIM-9H MISSILES	USA
	24 SCUD-B LAUNCHER SSM MISSILE SYSTEM WITH 120 MISSILES	SYRIA
	300 AIM-9L MISSILES	USA
	300 HONG YING-5 PORTABLE SAM MISSILES	CHINA
	130 CSA-1 SAM MISSILES WITH LAUNCHERS	CHINA
IRAQ	70 F-7 FIGHTER (CHINESE VERSION OF THE MIG-21)	EGYPT
	113 MIRAGE F-1C	FRANCE
	825 ROLAND MISSILES	FRANCE
	60 SA-8 SAM SYSTEMS	USSR
	38 ASTROL-II SS-30 ROCKET SYSTEMS	BRAZIL
	542 EXOCET MISSILES	FRANCE
	200 AS-30L MISSILES	FRANCE
	500 SA-6 GAINFUL SAM	USSR/POLAND
	360 SA-8 GECKO SAM	USSR
	200 SA-9 GASKIN SAM	USSR
	500 T-59 TANKS	USSR
	600 T-72 TANKS	USSR
	400 T-69 TANKS	CHINA

TABLE 4.19 (CONTINUED)

Source: Equipment figures for Iran and Iraq from SIPRI, pp. 249-266.

F. IRAN

1. Is the United States the Sole or Predominant Supplier of Military Arms?

Prior to the fall of the Shah of Iran, on 16 January 1979, the United States was the sole supplier of military equipment construction and related military services for Iran. Since then Iran has been forced to depend on the international arms market for military equipment to continue its war with Iraq.

This intensive type of re-supply of military equipment has had mixed results. First, Iran has paid very high prices for a small amount of old and unsophisticated weaponry. These military arms benefactors have been Israel, Italy, Greece, Syria, Libya, North Vietnam, North Korea, and China. Some believe the United States should be included on this list but the involvement of covert arms shipments is still under investigation. The most reliable sources show that all arms transfer, including the United States, to Iran were limited in size and sporadic in delivery (SIPRI, pp. 249-250; Cordesman, p. 733). Secondly, and possibly the most devastating, is that Iran has not been able to negotiate with a supplier that is willing and able to supply them with all the military equipment needed to continue the war with Iraq. Finally, unless

Iran reaches some type of peaceful accord with Western suppliers or the Soviet Union, they will not ever have the military capability they achieved under the Shah's government.

2. What was the Total Dollar Amount of the 36b Congressional Notifications During the Carter and Reagan Administrations?

There were no official 36b Congressional Notifications during either Reagan Administrations. In the Carter Administration there was only one year that any 36b Congressional Notifications were submitted. This was during fiscal year 1978 and was for $1.494 billion.

3. Did the Dollar Amount of the 36b Congressional Notifications Increase or Decrease During the Carter and Reagan Administrations?

Figure 4.12 contrasts the last proposed arms sale to Iran compared to the amount of proposals to the Persian Gulf by fiscal year.

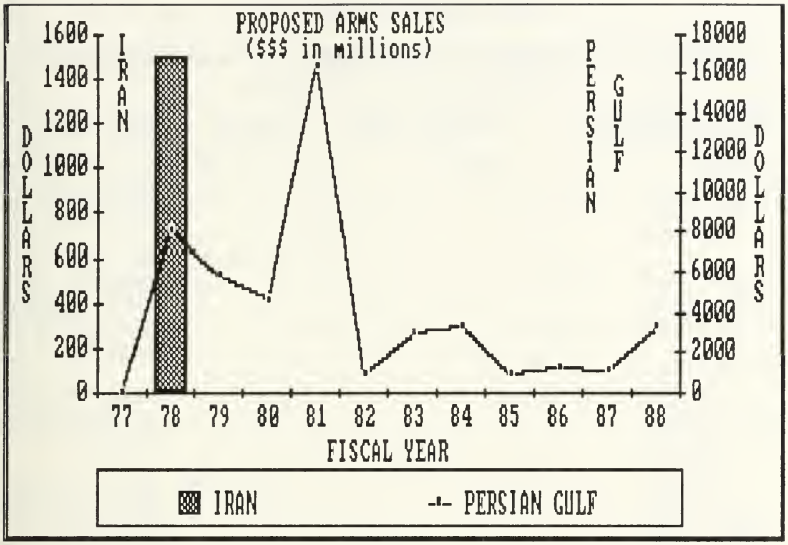
Since there were no 36b Notifications in fiscal year 1977, there was an increase in proposed arms sales for Iran during the Carter Administration.

4. What Are the Anticipated Payment Terms?

Iran used the Military Assistance Program (MAP), the Foreign Military Sales Financing Program and cash for major expenditures on military equipment with the United States (DSAA, pp. 24,60).

5. What is the Quantity of Proposed Arms Transfers?

The quantity of United States proposed military arms and related services to Iran until January 1979 was high.



Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 4.12 Proposed Arms Sales for Iran versus Persian Gulf

Table 4.20 portrays the type of military equipment and amount of each proposed sale in fiscal year 1978. This was the first and last year of 36b Congressional Notifications for Iran. The quantity of proposed arms sales is coded as high.

6. What was the Quality of the Proposed Arms Transfers?

Until the fall of the Shah, Iran was rated high in absolute and regional terms. The Shah's armed forces had state-of-the-art military equipment. There is no question that the United States supplied the Shah with enough military equipment and training to have the largest and most effective

TABLE 4.20

PROPOSED ARMS SALES TO IRAN FOR FISCAL YEAR 1978
(in millions of Dollars)

Administration	Fiscal Year	Amount	Equipment
Carter	1978	$ 170.0	11 RF-4E RECONN AIRCRAFT
		$ 45.6	SUPPLY SUPPORT OF F-14/PHOENIX WEAPON SYSTEM
		$ 67.9	TRAINING FOR F-14/PHOENIX SYSTEM
		$ 200.0	HELO LOGISTICS SUPPORT WITH CREW TRAINING
		$ 10.8	100 M548 CARGO CARRIERS
		$ 130.1	LOGISTICS CONTRACT FOR NAVY HELOS THRU CY1983
		$ 78.4	ENGINEERING CHANGES FOR F-14
		$ 39.0	2 T-ATF OCEAN TUGBOATS
		$ 192.0	84 8-INCH HOWITZERS AND 214 155MM HOWITZERS
		$ 13.7	186 AIM-9H MISSILES

TABLE 4.20 (CONTINUED)

Administration	Fiscal Year	Amount	Equipment
		$ 38.0	SPARE PARTS FOR AH-1J TOW HELO
		$ 125.0	CONTRACT FOR MISC SUPPLY SUPPORT
		$ 33.0	ADDITIONAL TECHNICAL ASSISTANCE
		$ 350.0	EQUIPMENT TO ARM 12 FRIGATES TO INCLUDE MK-13 GMLS, HARPOON MISSILES, CIWS, AND MK-32 SVTT

Source: Compiled by author from U.S. Senate Proceedings, October 1, 1977 to September 30, 1988.

military force in the Gulf (Cordesman, pp. 725-726). The last proposed arms sale in fiscal year 1978, Figure 4.20, shows continued support for the technically superior military equipment. With the break in diplomatic relations with the Islamic Republic of Iran there have been no further 36b Congressional Notifications since that time.

7. Is the Recipient a Major United States or Western Oil Supplier?

Iran owns the third largest known oil reserves in the Persian Gulf. One source estimated that in 1982 Iran's total reserve was 55.3 billion barrels (Cordesman, p. 21). Another

respectable source gave an 1985 estimate of crude oil reserves at 47.9 billion barrels (EIU, p. 31).

Exports of crude oil and refined products have been severely curtailed by the Iran-Iraq War. As illustrated in Table 4.21, there was a serious decline in exports in 1980 and 1981, with an increase in the follow-on years. Even though the volume increased in 1982 and beyond, it does not reflect the much lower prices for Iranian crude and the additional insurance costs that the Iranian government had to bear in order to trade. With crude oil and refined oil products being the major revenue for Iran, this devastating reduction in both price and amount exported has caused an overall deficit of $938.5 billion at the end of 1984 (EIU, p. 39).

Table 4.21 represents the gross export of crude oil and refined products through 1985.

TABLE 4.21

GROSS EXPORTS OF CRUDE OIL AND REFINED PRODUCTS
(in 000 barrels per day)

Year	Total
1965	1,677
1970	3,519
1975	5,532
1980	952
1981	809
1982	1,718
1983	1,816
1984	1,579
1985	1,609

Source: "The Economist Intelligence Unit" 1987-88, Iran, p. 32.

The United States has never purchased large amounts of crude oil from Iran. In fact, the 11% of Iranian crude received in 1978 was the largest percentage in any one year (Berkowitz, p. 198). Table 4.22 shows an average of the the top five oil recipients through 1983.

TABLE 4.22

AVERAGE OIL EXPORTS BY IRAN THROUGH 1983

Country	Percentage
Britain	13%
Japan	12%
France	10%
Canada	10%
West Germany	6%

Source: Cordesman, The Gulf and the Search for Strategic Stability, p. 11.

8. How Strategically Important is the Recipient's Geographic Location?

When the British government withdrew from their Middle East commitments, the United States was forced to create and maintain stronger regional allies to deter Soviet expansion. In order to stabilize United States commercial as well as military interests in the Persian Gulf and compete for influence with Soviet Union, the U.S. came to rely more and more on the Shah as a substitute for British power (Cordesman, p. 804).

The fall of the Shah, in January 1979, exposed the absence of United States power projection in the Persian Gulf

area and turned a once powerful ally into a hostile and potential threat, both politically and economically. In addition, the vacuum gave the Soviet Union the signal that they could expand into Afghanistan with no real interference from the United States. The Soviet Union invaded Afghanistan on December 27, 1979.

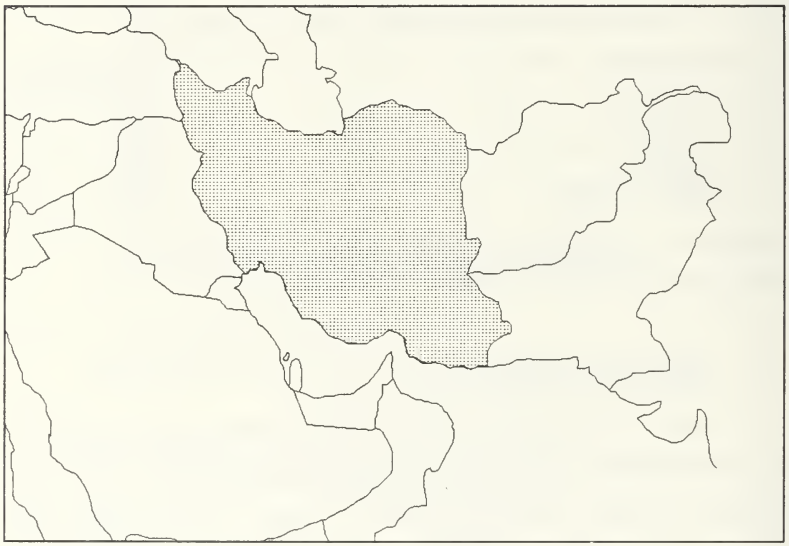


Figure 4.13 Iran

The United States has made significant inroads in diplomacy and strategic access with all members of the Gulf Cooperation Council. It has also been forced developed new tactics to ensure that a force can rapidly deploy. Yet, the

fact remains that Iran is still one of the most strategically important Gulf States to deter the Soviet Union (Figure 4.13).

Whether Iran is friendly to the United States or not, their major role in the Persian Gulf is to provide a buffer to keep the Soviet Union from expanding into the commercial oil fields of the Persian Gulf.

9. Were There Any Significant Events Affecting the Value of Aaccess?

The significant events that affected Iran are as follows:

1) Arab-Israeli War in June 1967,

2) Withdrawal of Great Britain from the East of Suez and all Gulf Commitments in January 1968,

3) Formation of Organization of Petroleum Exporting Countries in 1970,

4) Iraq signs a Treaty of Friendship with the Soviet Union in April 1972,

5) Arab-Israeli War in October 1973,

6) Oil Crisis in 1973 that resulted in a three fold increase in oil prices,

7) Fall of the Shah on January 16, 1979,

8) Oil Crisis in 1979 that resulted in another increase in oil prices,

9) The Soviet Union invades Afghanistan on December 27, 1979,

10) Iraq invades in September 1980,

11) Israeli invasions of Lebanon in June 1982,

12) United States agrees to re-flag and escort Kuwaiti oil tankers in the Persian Gulf in October 1987,

13) A ceasefire is declared in the Iran-Iraq War in August 1988.

10. Who is the Major Military Arms and Related Services Supplier to Adjacent Adversaries?

There are two countries that are a threat to Iran's regional and internal security. They are the Soviet Union and Iraq. Iraq purchased the bulk of its military equipment from the Soviet Union and France. Table 4.23 is an estimate of the major weapons in Iraq's inventory.

TABLE 4.23

MAJOR WEAPON SYSTEMS OF IRAQ

Country	System	Supplier
IRAQ	70 F-7 FIGHTER (CHINESE VERSION OF THE MIG-21)	EGYPT
	113 MIRAGE F-1C	FRANCE
	825 ROLAND MISSILES	FRANCE
	60 SA-8 SAM SYSTEMS	USSR
	38 ASTROL-II SS-30 ROCKET SYSTEMS	BRAZIL
	542 EXOCET MISSILES	FRANCE
	200 AS-30L MISSILES	FRANCE
	500 SA-6 GAINFUL SAM	USSR/POLAND
	360 SA-8 GECKO SAM	USSR
	200 SA-9 GASKIN SAM	USSR
	500 T-59 TANKS	USSR
	600 T-72 TANKS	USSR
	400 T-69 TANKS	CHINA

Source: Equipment figures for Iran and Iraq from SIPRI, pp. 249-266.

V. ARMS SALES AND THE U.S. ECONOMY

A. METHODOLOGY

A study conducted in 1976 by the Congressional Budget Office looked at different savings opportunities to the Department of Defense from a foreign military sales program (Congressional Budget Office, May 24, 1976). Even though this study was conducted over ten years ago, in the author's opinion the positive aspects of the impact of a foreign military sales program are still relevant. A second study was conducted later to examine the impact of a restraint or total ban of foreign military sales using a macro economic model (Congressional Budget Office Working Paper, July 23, 1976). The assumption made by the study was that if all existing commitments were fulfilled, the impact would be minimal. It is probable that this study is no longer valid because of the changes over the last ten years (Bajusz and Louscher, p. 2).

In the author's view neither study adequately addressed consequences or benefits of a foreign arms sales program or ban on the military industrial complex. Also it did not address the impact on employees of those companies with regard to income loss or employment.

This chapter examines the impacts on the United States economy from foreign military sales to Persian Gulf countries. It is formatted as an application of the trend analysis model

used by Bajusz and Louscher in their study of economic impacts on military sales to the Middle East. Their model was chosen because of the applicability of measurement devices and the straight forward approach in determining a demand for military equipment. Once the demand is determined, the model concludes with a measurement of the possible losses in income and employment opportunity. Their study uses the actual sales of selected equipment as the baseline, whereas this study uses the proposed arms sales or transfers from the Congressional Notifications (AECA, Section 36b).

The results of the trend analysis will show a projected annual demand of United States military equipment to the year 2000. Using the demand as a constant, the trend analysis model is then applied to various income and employment multipliers to show those projected annual losses to the year 2000. In addition, a tax multiplier is used to calculate the projected loss in tax revenues for the United States Government.

B. FOREIGN MILITARY SALES AND THEIR ECONOMIC IMPACT

1. Are Foreign Military Arms Sales and Transfers Important to the United States Economy?

A report from the Committee on Foreign Relations to the United States Senate over a decade ago remains the crux of the debate on Foreign Military Sales and the economy.

> The diversity of opinion about arms transfers makes it impossible to devise a concise statement of the problem that will satisfy everyone. Some feel that the problem lies at the macro level--that arms sales worldwide are consuming scarce human and economic resources. Others see

> the problem as a regionally-bound short-term phenomenon that is already subsiding....Others feel that U.S. arms exports are being driven by the competitive policies of the other major suppliers and the superior quality of U.S. defense products. (Congressional Report on Arms Transfer Policy, p. 3)

This report precipitated a debate over two different schools of thought concerning foreign military sales. The first school questioned whether or not the United States really needed a government sponsored foreign military sales program. It contends that the derived economic benefits are a short run gain and that a ban on foreign military sales by the United States would promote worldwide arms control. Hence the essence of their argument was that the United States foreign military sales program should be banned.

The second school of thought points to two specific benefits of a government sponsored foreign military sales program. The first benefit was the real cost savings realized by the United States Government when purchasing military equipment. The second benefit was the increase in direct and indirect income for the American work force, the availability of work (measured in man-years) and an increase in tax revenue for the treasury over the long run. Therefore, they contend that it is necessary to the general health and welfare of the United States economy to promote a large military industrial base.

The first school of thought is based on a Congressional Working paper in 1976 that studied the economic effects of a ban on all foreign military sales. The study encompassed

the effect on domestic employment, the gross national product, price levels and other possible consequences of a ban on foreign military sales.

The baseline date used for the study had a cutoff date of October 01, 1977, and that all orders in 1976 would still be filled. The study did not take into account commercial sales, but concentrated strictly on government- to-government sales. In 1976 commercial sales were considered insignificant with only $.6 billion in sales per year. By fiscal year 1988, direct commercial sales to foreign buyers had grown to $2 billion a year (Bajusz and Louscher, p. 51).

The results of the analysis stated that by fiscal year 1981 a ban on foreign military sales would reduce the Gross National Product (GNP) by $20 billion. The study went on to project that based on a $2,500 billion GNP, the reduction of $20 billion for foreign military sales would only reduce the GNP to about $2,480 billion. The associated projected price level would be 0.2 percent lower. The analysis also projected an unemployment increase of only 0.3 percentage points or approximately 350,000 jobs would be lost if the FMS program were banned. Finally, the analysis resulted in a projected decrease in net exports of approximately $7.5 billion (Congressional Working Paper on the effect of foreign Military Sales on the U.S. Economy, pp. 1-5).

The second school of thought, born at the same time, was more positive toward for foreign military sales program.

Proponents of this school prepared a defense by pointing out the budgetary cost savings to the Department of Defense (DOD) resulting from foreign military sales (Congressional Working Paper on Budgetary Cost Savings to the Department of Defense, pp. 3-5).

These savings were classified into five major categories:

a. Research and Development Recoupment

This is the first and most readily identifiable saving from foreign military sales. Research and Development (R&D) recoupment refers to the surcharge which is added to the purchase price of a proposed arms sale or service to be sold in a government-to-government agreement. In fact, the Arms Export Control Act (Sections 21 and 22) commands the price that all United States agencies and departments much charge for arms sales and services to a foreign buyer. The "no-loss" rule requires that the price includes a charge for security assistance program administration costs. This administrative charge is made on all Foreign Military Sales (FMS) and Military Assistance Programs (MAP) and is approximately three percent for standard equipment and five percent for non-standard equipment. Above this assessment there is an additional surcharge by the Defense Security Assistance Agency (DSAA) for a portion of the R&D costs. These funds go to service department that originally procured the equipment. The total surcharge for these administrative and R&D costs

usually averages to nine percent above the real cost that the Department of Defense (DOD) originally paid for the equipment (Commitment to Freedom, p. 33). This surcharge represents an expense that would have been sustained by the United States and represents a cost savings. These savings percentages are credited directly to DOD by the Office of Management and Budget (OMB).

b. Overhead

The second most identifiable potential cost savings is related to overhead costs. Overhead costs are normally classified into either fixed or variable catagories. Fixed overhead costs do not normally fluctuate with the number of items produced and are relatively insensitive to changes in the volume of sales. Examples of fixed overhead costs are rent, taxes, insurance and depreciation on manufacturing facilities. Variable overhead costs are those which do vary with the volume of sales. Examples of variable overheads costs are light, heat and power and supervisory salaries used in manufacturing facilities. It is normal for the contractor to include these costs as part of the price of the item. Since the fixed portion of overhead costs does not normally fluctuate with volume of activity the more units produced, the less each unit must bear as its proportional share of the cost. If the foreign buyer is charged for a portion of those fixed costs that would normally be charged to military equipment purchased by DOD then a cost savings is realized.

The sale of military equipment and services to foreign countries can generate a cost savings when they absorb part of these cost that otherwise would be borne by DOD. These savings are sometimes difficult to quantify. In order to quantify significant overhead savings on foreign military sales the assumption must be made that the absence of foreign sales in the United States would not significantly change the production base. The rationale for this is the argument that the United States production base is sized to meet emergency requirements and would not be reduced in peacetime in the absence of foreign military sales (Congressional Working Paper on Budgetary Cost Saving to DOD, p. 4). In addition, the sharing of overhead cost savings can also be attributed to commercial sales as well. If the foreign buyer is dealing directly with a commercial manufacturer to purchase military equipment that is being produced for DOD, then the commercial sale could result in a lower cost per unit for the United States Government.

c. Learning Curve Effects

Learning curve effects are those savings that result from longer production runs. Factors that are responsible for reducing the average cost per job are, familiarization by workmen, general improvement in total coordination and development of more efficiently produced subassemblies. These factors are well-documented in a RAND study of aircraft and missile system. RAND concluded that in the absence of other

factors the cumulative average cost of aircraft and missiles decreases as the total number produced increases [RAND, June 1971]. If the sale of military equipment to a foreign country promotes a longer production run, then the same military equipment when purchased by DOD should be acquired for less resulting in a cost savings.

d. Economies of Scale

This refers to the principle that asserts: When the rate of production is expanded to full utilization of the production facility, the manufacturer incurs lower average costs. As in the above example of aircraft and missiles systems, if the foreign sales promotes a lower average cost per item, then DOD realizes a cost savings.

The only problem with the Principles of the Learning Curve and Economies of Scale is that the cost savings are extremely difficult to isolate and quantify in an environment other than strictly a military manufacturing business.

e. Production Line Gap

The last cost savings for DOD associated with foreign military sales is concerned with the actual opening and closing of the production line. If a sale of military equipment to a foreign buyer facilitates a contractor keeping a production line operating between consecutive DOD buys, DOD can realize a significant cost savings by avoiding termination, set-up and tooling costs.

These two opposing theories are equally persuasive when viewed in the abstract. However, examining economic projections using trend analysis and actual historic proposed arms transfer data, may provide evidence on real world consequences.

2. What is the Economic Impact of Restraint on Prospective Military Sales to the Persian Gulf?

Foreign military sales will have economic impacts on the United States economy in a number of ways. The first impact is on income whether direct or indirect. Direct income is that amount that the contractor or sub-contractor receives for producing the military equipment. This includes the individual product and the support services such as parts support, training and in some cases future modifications. Indirect income encompasses money that is spent by the employees in the surrounding community. These are goods and services such as housing, food, clothing. The second impact is employment. This too can be either direct or indirect. Direct employment applies to those hired to work for the primary contractor and sub-contractors that were awarded the foreign military sales contract. Indirect employment is associated with those goods and services provided by the surrounding community that expand with the size of the contract. The third impact is the income taxes and other taxes that are assessed on both companies and employees and collected by the United States. Any contract that adds direct income to the contractor will affect the tax base for that

company. Indirect income is affected much the same way. Taxes from the employee's earnings within the corporate structure and from the businesses from the surrounding community are two examples. (Bajusz and Louscher, pp. 51-53)

Before attempting to explain the economic impact of an imposed restraint on prospective military sales, a basis for the demand of military equipment must be developed using a trend analysis. The trend analysis for demand is computed by calculating the average dollar value of proposed arms sales or transfers over the time period specified. This will establish the average annual demand of arms sale to Persian Gulf countries.

The demand for military equipment and services originates from the foreign country that wishes to obtain the goods. In turn the Executive Branch must decide whether equipment the prospective buyer wants is available, that the equipment will further the political and ideological interests of the United States, and how the prospective buyer will pay for it. This decision process is culminated with the submission of a 36b Congressional Notification of intent to sell military equipment or services by the Executive Branch. Since Congress has never turned down a 36b Notification, all of the proposed arms sales during fiscal years 1978 to 1988 are used to form a baseline for the demand.

A trend analysis is used because it measures the demand based on the assumption that past proposed arms sales

will give an approximation of future sales of military equipment (Bajusz and Louscher, pp. 71-95).

For this study the demand for military equipment and services is divided into three time periods. The first time period, Table 5.1, is from fiscal year 1978 to 1981 when proposed arms sales to selected Persian Gulf countries (Saudi Arabia and Kuwait) were at their highest in terms of dollars. When determining the economic impacts this table will provide the highest demand or largest impact on income and employment if arms sales or transfers are restrained in the future.

TABLE 5.1

AVERAGE PROPOSED ARMSSALES TO SAUDI ARABIA AND KUWAIT
FISCAL YEARS 1978-1981
(in billions of Dollars)

Fiscal Year	Saudi Arabia	Kuwait
1978	$ 6.501	$ .058
1979	5.827	.107
1980	4.571	.024
1981	15.326	.150
TOTALS	$32.225	$ .339
GRAND TOTAL		$32.564
AVERAGE YEARLY PROPOSED SALES		$ 8.141

Source: Compiled by author from Senate Proceedings, October 1, 1978 to September 30, 1988.

The second time period, Table 5.2, is from fiscal year 1982 to 1988 when proposed arms sales to the same selected countries were at their lowest. In contrast with the previous table this represents the lowest demand or smallest impact on

income and employment if arms sales or transfers are restrained in the future.

TABLE 5.2

AVERAGE PROPOSED ARMS SALES TO SAUDI ARABIA AND KUWAIT
FISCAL YEARS 1982-1988
(in billions of Dollars)

Fiscal Year	Saudi Arabia	Kuwait
1982	$ .562	$ .097
1983	2.933	0
1984	3.224	.160
1985	.777	0
1986	1.056	.70
1987	1.085	0
1988	1.397	1.900
TOTALS	$11.034	$ 2.227
GRAND TOTAL		$13.261
AVERAGE YEARLY PROPOSED SALES		$ 1.894

Source: Compiled by author from Senate Proceedings, October 1,1978 to September 30, 1988.

The selected Persian Gulf countries used for the two time periods are Saudi Arabia and Kuwait. This is because they were the only Persian Gulf countries with enough proposals over the two time periods to project high and low trends. Proposed sales for the other Persian Gulf countries, Oman, Bahrain and the United Arab Emirates, were too erratic to include in these two time periods.

The third time frame, Table 5.3, depicts the average trend of all five Persian Gulf countries in fiscal years 1978

to 1988. This provides an overall average demand of military equipment based on proposed arms sales or transfer.

TABLE 5.3

AVERAGE [RP[PSED ARMS SALES TO PERSIAN GULF
FISCAL YEARS 1978-1988
(in billions of Dollars)

Fiscal Year	Saudi Arabia	Kuwait	Oman, Bahrain, UAE
1978	$ 6.501	$ .058	$ 0
1979	5.827	.107	0
1980	4.571	.024	.040
1981	15.326	.150	.890
1982	.562	.097	.114
1983	2.933	0	0
1984	3.224	.160	0
1985	.777	0	.116
1986	1.056	.70	.152
1987	1.085	0	0
1988	1.397	1.900	0
TOTALS	$43.259	$ 2.566	$ 1.312
GRAND TOTAL			$47.137
AVERAGE YEARLY PROPOSED SALES			$ 4.285

Source: Compiled by author from Senate Proceedings, October 1, 1978 to September 30, 1988.

The results of the three trend analyses are compiled and presented in Table 5.4. The table shows both the annual demand of arms sales and services from the preceding tables and a projection of that demand to the year 2000. The projection to the year 2000 provides an estimate of the total market demand.

These results show an annual sales demand valued from a low at $1.89 billion to a high at $8.14 billion. Projected

TABLE 5.4

VALUE OF SALES DEMAND TO THE YEAR 2000:
TREND ANALYSIS
(in billions of Dollars)

Category	Projected Annual Average	Total Demand
HIGH		
Saudi Arabia and Kuwait (1978-1981)	$ 8.141	$ 97.7
LOW		
Saudi Arabia and Kuwait (1982-1988)	$ 1.89	$ 22.7
Persian Gulf (1978-1988)	$ 4.29	$ 51.6

Source: Compiled by author from Senate Proceedings, October 1, 1978 to September 30, 1988.

to the year 2000, arms sales could increase from a low of $22.7 billion to a high of $97.7 billion.

The rationale for using Saudi Arabia and Kuwait for a high and low projection was the total amount of proposed sales and the varied types of equipment in those proposals. The amount of the proposed arms sales or transfers to these two countries included military arms and related equipment, support services and contracts, construction and training. Even though Saudi Arabia has signed an extensive contract with Britain for jet fighter aircraft, weaponry, supply support and training, this does not reduce the amount of United States military equipment that has been sold in previous years. Previously sold U.S. military equipment will still need supply support and training services. In addition the recent sale to

Kuwait for F/A-18C fighter and support equipment will open new supply contracts and construction in the future. Therefore the results are feasible.

To test validity of the results obtained using selected countries (Saudi Arabia and Kuwait) an additional trend analysis was conducted. The model was applied using data for the five countries in the Persian Gulf over the entire eleven year period. The results shown in Table 5.4 show an annual proposed demand of $4.29 billion which is reasonable considering the high and low trends using the only two selected countries. Similar results were obtained for the projected total demand of proposed arms sales to the year 2000.

If the United States restrains or bans the foreign military sales program, there will be impacts on both income and employment. These impacts directly involve the manufacturing industry by decreasing their opportunity for income, reducing employment for the surrounding community and thereby reducing the tax base of the government.

One contemporary model used to analyze these impacts on the economy was presented by Bajusz and Louscher in Arms Sales and the U.S. Economy, 1988. The multipliers for their model were based on U.S. Bureau of Labor Statistics and Defense Security Assistance Agency (DSAA) estimates and actual sales data provided by DSAA. This study will employ their basic model, but will substitute 36b Notification database

compiled by the author to project loss of income and man-years of employment. To ensure validity in forecasting these economic impacts the results will be divided into three time periods. The first time period will be from fiscal year 1978 to 1981 when the amount of proposed arms sales or transfers were the highest. The second period will be from fiscal year 1982 to 1988 when the amount of proposed arms sales or transfers were at their lowest. The third will combine the five countries of the Persian Gulf over the entire time period, 1978 to 1988 to test the validity of using the selected countries of Saudi Arabia and Kuwait for a high and low results.

The Bureau of Labor Statistics recommends a multiplier of 1.96 for estimating direct and indirect impacts on income. Bahusz and Louscher conducted studies of various multipliers to compare with the recommendation of the Bureau of Labor Statistics. Table 5.5 is a summary of those findings. The table is presented in this study to show the conservatism in calculating the impacts of income by using a multiplier of 1.96.

To determine the direct and indirect employment loss for an arms sales restraint, a multiplier of 1.75 was chosen. DSAA data suggests this as a viable indicator associated with overseas sales (Bajusz and Louscher, p. 102). The model used by Bajusz and Louscher provided an independent calculation to

TABLE 5.5

INCOME MULTIPLIERS

Researcher	Year	Model Used	Industry	Multiplier
Billings	1970	Economic Base	Military	2.29
		Input-Output		2.44
Tiebout	1965	Economic Base	Defense	2.436
Savage	1974	Input-Output	Defense	2.00
Garnick	1970	Input-Output	Military	2.26

Source: Compiled from U.S. Bureau of Labor Statistics, Department of Labor by Bajusz and Louscher, Arms Sales and the U.S. Economy, p. 104.

test the validity of the DSAA multiplier of 1.75. Table 5.6 shows the results of that study.

TABLE 5.6

EMPLOYMENT MULTIPLIERS
FOR YEARS 1978-1986

STATE	OVERALL	AEROSPACE
Arizona	3.7	1.26
California	1.08	1.49
Indiana	1.90	2.13
Kansas	2.06	2.28
New Jersey	1.59	1.52
New York	1.39	1.87
Ohio	1.97	2.08
Pennsylvania	1.99	2.02
Texas	2.01	1.65
Washington	1.77	1.76
Average	1.95	1.80

Source: Figures compiled from Bajusz and Louscher, Arms Sales and the U.S. Economy, p. 103.

Table 5.6 shows an average employment multiplier of 1.95 and an aerospace industry multiplier as 1.80 throughout the major military industrial area of the United States. This study will use the recommended multiplier of 1.75 because of its conservativeness and the author's desire not to overstate unemployment.

In determining the employment generated by the foreign military sales program, DSAA estimates that every $1 billion of military sales will equate to 25,000 to 35,000 man-years of direct employment and 18,750 to 26,250 man-years of indirect employment (Bajusz and Louscher, p. 55). A Bureau of Labor Statistics study states that if a multiplier of 1.75 is used, then a direct employment estimate of 35,000 man-years should be used. (U.S. Bureau of Labor Statistics, January, 1982) In the interest of conservativeness this study will use a direct employment man-year figure of 25,000 and an indirect employment man-year figure of 18,750. Man-years were used in the Bajusz and Louscher model because "the term man years of employment rather that jobs...is a more analytically accurate representation of reality." (Bajusz and Louscher, p. 60)

The results of this study, using the Bajusz and Louscher model, are compiled and presented in Tables 5.7 and 5.8.

Table 5.7 shows an annual income loss of $3.7 billion to $15.9 billion. Projecting this loss out to the year 2000, the income losses could increase from $44.5 billion to $191.5

billion. Table 5.8 shows an annual employment loss of 81,250 to 348,750 man-years. When projected out to the year 2000 the employment losses expand from 976,250 to 4,201,250 man-years.

TABLE 5.7

IMPACT ON INCOME WITH PERSIAN GULF
ARMS SALES RESTRAINT
(to the Year 2000)

TREND ANALYSIS
(in billions of Dollars)

Country		Direct	Indirect	Total
Saudi Arabia and Kuwait (High)	Annual	8.1	7.8	15.9
	Total	97.7	93.8	191.5
Saudi Arabia and Kuwait (Low)	Annual	1.9	1.8	3.7
	Total	22.7	21.8	44.5
Persian Gulf (Average)	Annual	4.3	4.1	8.4
	Total	51.6	49.2	100.8

Sources: Format adapted from Bajusz and Louscher, Arms Sales and the U.S. Economy, pp. 110-111. Figures compiled by author from Senate Proceedings, October 1, 1978 to September 30, 1988.

To test the validity of the results obtained using selected countries (Saudi Arabia and Kuwait) an additional trend analysis was conducted. The model was applied using data for the five countries in the Persian Gulf over the entire eleven year period. The results in Table 5.7 show an annual income loss of $8.4 billion with a projected total income loss of $100.8 billion to the year 2000. It also shows

TABLE 5.8

EMPLOYMENT IMPACT ON PERSIAN GULF
ARMS SALES RESTRAINT
(measured in man-years)

TREND ANALYSIS

Country		Direct	Indirect	Total
Saudi Arabia and Kuwait (High)	Annual	202,500	146,250	348,750
	Total	2,442,500	1,758,750	4,201,250
Saudi Arabia and Kuwait (Low)	Annual	47,500	33,750	81,250
	Total	567,500	408,750	976,250
Persian Gulf (Average)	Annual	107,500	76,875	184,375
	Total	1,290,000	922,500	2,212,500

Sources: Format adapted from Bajusz and Louscher, Arms Sales and the U.S. Economy., pp. 110-111. Figures compiled by author from Senate Proceedings, October 1, 1978 to September 30, 1988.

an annual employment loss of 184,375 man years with a projected total employment loss of 2,212,500 man-years.

As previously discussed, with the loss of income, both direct and indirect, there is a loss in the tax revenues collected by the United States Government. For this study the marginal tax multiplier in the Administration's fiscal year 1987 presentation to Congress of .25 is used. (Bajusz and Louscher, p. 109) Using this multiplier there is a projected annual loss in tax revenue of $0.93 billion to $3.98 billion. Projected to the year 2000 this loss expands from $11.13 billion to $47.9 billion. To test the validity of this data, the tax multiplier was compared to the five countries of the

Persian Gulf. This analysis shows a projected loss in taxable revenue through the year 2000 to be from $2.10 billion to $25.2 billion.

VI. CONCLUSIONS

The foregoing case studies were conducted using the structured, focussed comparison approach using a set of standardized, general questions of each case. This assures that the data obtained from the various cases are comparable and are relevant to the stated hypotheses. This portion of the thesis is intended to contribute to the order, cumulative development of knowledge and theory about formal 36b Congressional Notifications and their implications in formulating an arms transfer policy and strategic access. This section of the study examines the four hypotheses:

H1) The Democratic Administration (fiscal years 1977-1980) under President Carter obtained a reduction in United States proposed arms transfers to the Persian Gulf under the Arms Transfer Policy Directive of May 19, 1977.

H2) The Republican Administrations (fiscal years 1981-1988) under President Reagan promoted an increase in United States proposed arms transfers in the Persian Gulf under the Arms Transfer Policy Directive of July 8, 1981.

H3) Foreign Military Sales (FMS) are a major influence in developing United States foreign policy in the Persian Gulf and was the primary instrument used to gain strategic access.

H4) Foreign Military Sales will play a major role in defining United States economic and financial issues in the future.

A. PERSIAN GULF

The results of the case studies are summarized in Tables 6.1 through 6.3. These tables are an overview of the effect of proposed arms sales by the United States to the Persian Gulf for fiscal years 1977 to 1988. Thus, Hypotheses 1, 2, and 3 will be discussed by Presidential administration.

1. The Carter Administration 1977-1980

Table 6.1 is a summation of the individual case studies:

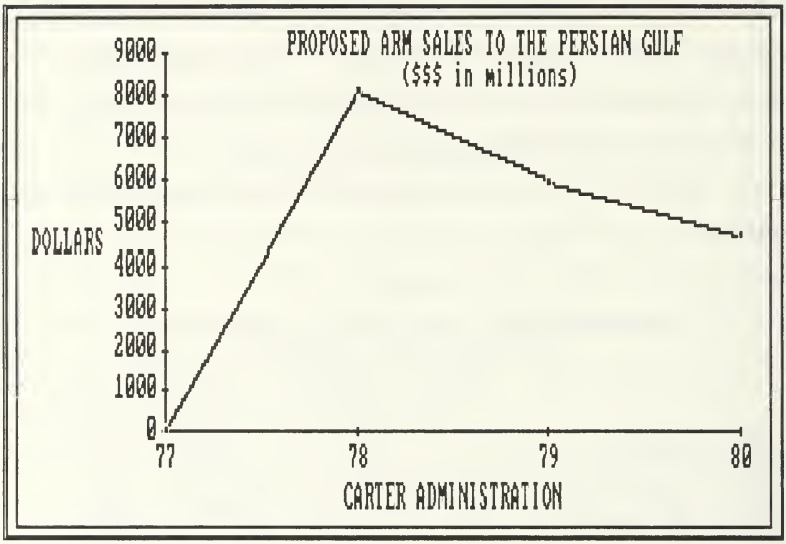
TABLE 6.1

PROPOSED ARMS SALES TO THE PERSIAN GULF
(FISCAL YEARS 1977-1980)

		SARABIA	OMAN	KUWAIT	IRAN
US SOLE OR PREDOMINANT SUPPLIER		PRED	NO	NO	SOLE
INCREASE OR DECREASE IN 36b's		DEC	INC	INC	DEC
METHOD OF PAYMENT	CASH CREDIT GRANT	CASH	CRED	CASH CASH GRANT	CRED
QUANTITY	NEGL SMALL MOD HIGH	HIGH	NEGL	SML	HIGH
QUALITY	ABSOL REGION SMALL	MOD MOD	LOW LOW	LOW MOD	HIGH HIGH
SUPPLY OIL US OR WEST*	MINOR MOD MAJ	US-SMALL WEST-MOD	NONE MOD	MIN MOD	SMALL MOD
GEOSTRATEGIC IMPORTANCE	LOW MOD HIGH	HIGH	HIGH	HIGH	HIGH

* Designation of WEST includes Western Europe and Japan.

The data table 6.1 and the trend depicted in Figure 6.1 supports Hypothesis 1.



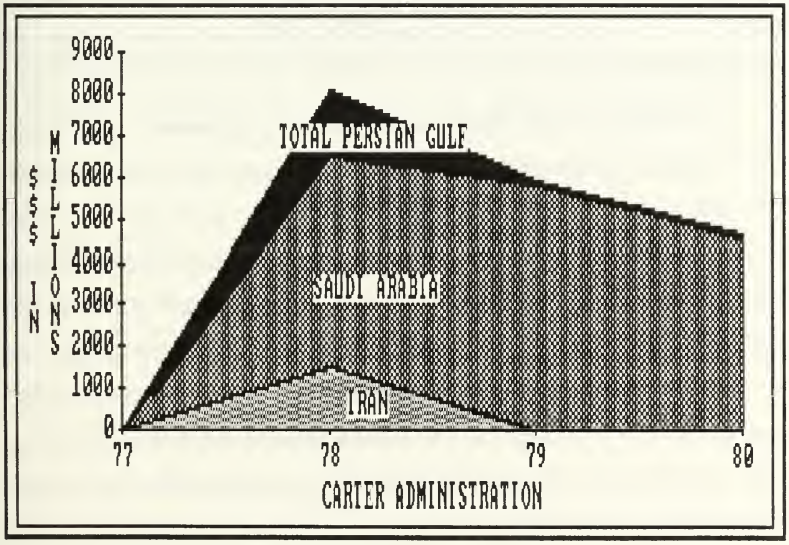
Source: Compiled by author from Senate Proceedings from October 1, 1977 to September 30, 1988.

Figure 6.1 Proposed Arms Sales or Transfers to the Persian Gulf by the Carter Administration

The Carter Administration proposed arms sales and services to four Persian Gulf countries; Saudi Arabia, Oman, Kuwait, and Iran.

Table 6.1 shows a decrease in arms proposals for Saudi Arabia and Iran and Figure 6.1 graphically correlates this decrease in arms proposals.

Figure 6.2 shows that the proposed arms sales and services for Saudi Arabia declined from a fiscal year 1978 high of $8.05 billion to $5.9 billion in 1979 to a low of $4.6 billion in 1980. The proposals for Saudi Arabia during the Carter Administration were mixed between construction and military hardware. The Carter Administration concentrated on modernization of the Saudi armed forces. Referring back to Table 4.2 will show that proposed sales for construction services was three to one over the proposed sales for military hardware.



Source: Compiled by author from Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 6.2 Proposed Arms Sales to the Persian Gulf versus Proposed Armed Sales and Services to Saudi Arabia and Iran

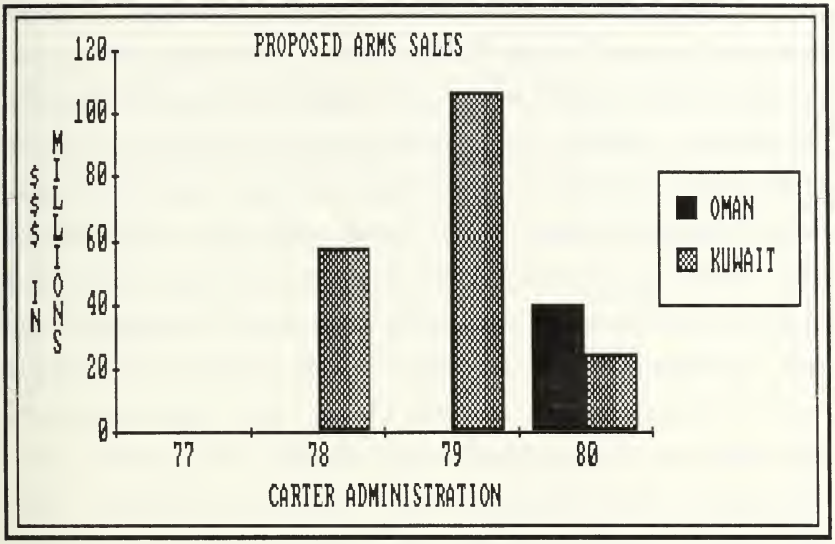
Figure 6.2 shows that the proposed arms sales and services for Iran. It shows a substantial increase in fiscal year 1978 of $1.494 billion but sharply declines to zero after that. The Shah's government fell on January 16, 1979 and all diplomatic ties were severed with the new Islamic government. In the past, the United States placed great importance on the strategic access to the Persian Gulf that Iran provided. With this level of significance, it is postulated that the marked decrease in arms proposals would not have been reduced to zero if the diplomatic ties had not been cut.

Referring back to Table 6.1, and, as depicted by Figure 6.3, there is an increase of proposed arms sales for Oman and Kuwait.

Figure 6.3 shows the increase in proposed arms sales for both Oman and Kuwait were negligible to small in quantity and minuscule in amount. Oman had one proposal for $40 million in fiscal year 1980. Kuwait had three arms proposals; $57.6 million in 1978, $107.3 million in 1979, and $24 million in 1980. Compared to the total dollar amount proposed for Saudi Arabia, their effect on strategic access is immaterial.

Table 6.1 supports and holds Hypothesis 3 to be true.

The fall of the Shah in 1979 created an abyss for United States foreign policy and strategic access in the Persian Gulf. The United States had been able to overcome the temporary setbacks from other regional commitments that did not coincide with the ideological beliefs of the Persian Gulf



Source: Compiled by author from Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 6.3 Proposed Arms Sales to Oman and Kuwait

governments. Support of Israel in both Arab-Israeli Wars of 1967 and 1973 and the oil crisis of 1973 did not appear to harm the United States access until the Islamic Revolution in Iran.

By itself the Islamic Revolution did not cause a change in status for the United States in the Persian Gulf. There were several significant events that changed the direction of the Carter Transfer Policy Directive of May 19, 1971 that called for a worldwide reduction in arms sales and transfers.

First, the loss of an old ally such as Iran coupled with the American hostage situation created doubt and criticism of United States resolve to support friends in hostile situations. Second, the situation exposed the absence of the United States power projection in the Persian Gulf. This was a clear signal to the Soviet Union that they could expand their power base without fear of retaliation from the United States. The Soviet Union invaded Afghanistan on December 27, 1979. Third, when Iraq invaded Iran for control of the Shatt al Arab, there was no cause for alarm, until Iran turned the war around in their favor. This caused the predominantly Sunni Muslim governments of the Persian Gulf to wonder just how long it would be before the Shiite Islamic Revolution spread to their countries.

On March 27, 1980, Secretary of State, Cyrus Vance, announced that President Carter was calling off the program to trim foreign arms sales. He said that "while we remained convinced" that international agreements to restrict international arms sales "can contribute to a safer world we do not plan to reduce further the ceiling on our own arms transfers" (Senate Proceedings, April 29, 1980, p. 9364). Since most of the foregoing events took place in the last 18 months of the Carter Administration, the only thing he could do was rescind the arms sales reduction of his 1977 directive and trade military "arms sales or transfers for access" to regain what was lost.

The United States already had an agreement with the Omani government for use of Al-Masirah Island. In 1980 the administration submitted a 36b Notification for a proposed sales of C-130H cargo aircraft (including supply support and pilot training) and 250 Sidewinder missiles to arm their British made Jaguar and Hunter jet fighters on credit. The quality of the military equipment in the proposals was low, but it provided for greater frequency of access to Al Masirah instead of staging support from Diego Garcia which is over 2000 miles away.

Kuwait's geographic proximity to the Iran and Iraq made the 36b Notifications in 1978 and 1979 for TOW and Hawk Missiles a major contributor for strategic access. After Iraq invaded Iran, another 36b Notification for a proposed sale of armored personnel carriers, ambulances, command post carriers and mortar carriers was clearly an attempt to ready Kuwait for a ground war in case the fighting spilled over their borders.

2. The Reagan Administration 1981-1984

Table 6.2 is a summation of the individual case studies.

The data shown in Table 6.1 and the trend depicted in Figure 6.4 supports Hypothesis 2.

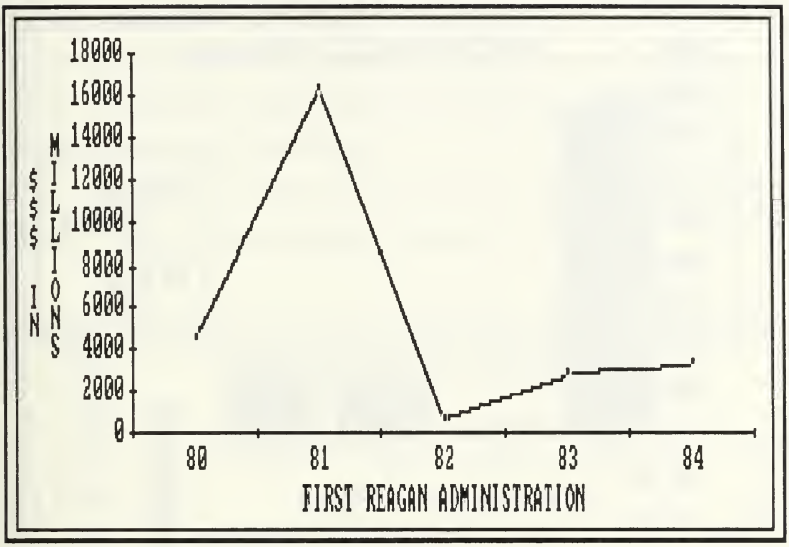
The first Reagan Administration proposed arms sales and services to five Persian Gulf countries; Saudi Arabia, Oman, United Arab Emirates, and Kuwait.

TABLE 6.2
FIRST REAGAN ADMINISTRATION
PROPOSED ARMS SALES TO THE PERSIAN GULF
(FISCAL YEARS 1981-1984)

		SARABIA	OMAN	UAE	BAHRAIN	KUWAIT
US SOLE OR PRE-DOMINANT SUPPLIER		PRED	NO	NO	NO	NO
INCREASE OR DECREASE IN 36b's		INC	INC	INC	INC	INC
METHOD OF PAYMENT	CASH CREDIT GRANT	CASH	CRED	CASH	CASH	CASH
QUANTITY	NEGL SMALL MOD	HIGH	SML	MOD	SML	SML
QUALITY	HIGH ABSOL REGION	MOD HIGH	LOW LOW	LOW LOW	LOW MOD	LOW MOD
SUPPLY OIL US OR WEST*	SMALL MINOR MOD MAJ	US-SML WEST-MOD	MOD	NONE MOD	SML MIN	SML SML MOD
GEOSTRATEGIC IMPORTANCE	LOW MOD HIGH	HIGH	HIGH	LOW	HIGH	HIGH

* Designation of WEST includes Western Europe and Japan.

Table 6.2 shows an increase in proposed arms sales for all five countries. Since the proposed dollar amount for Saudi Arabia is in billions of dollars, Figure 6.5 is used to graphically correlates the increase in proposed arms sales for Saudi Arabia compared to the entire Persian Gulf. The increase in proposed arms sales for the remaining four Persian

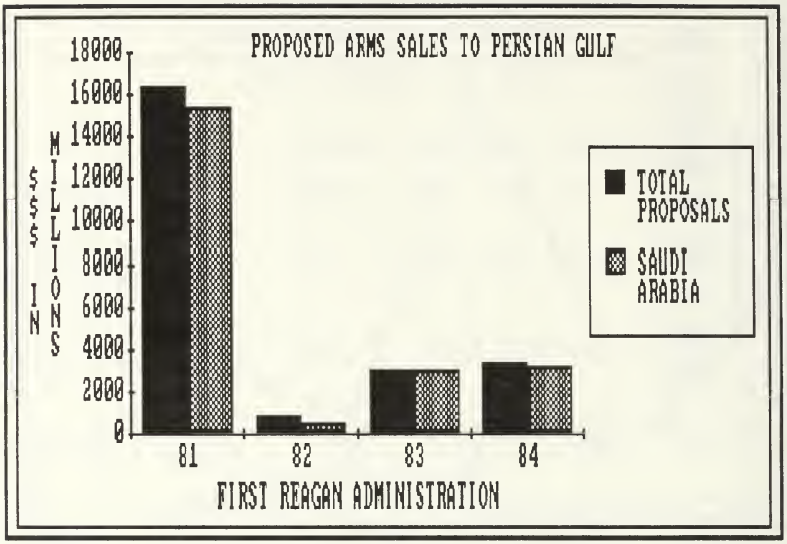


Source: Compiled by author from Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 6.4 Proposed Arms Sales or Transfers to the Persian Gulf in the First Reagan Administration

Gulf countries is in millions of dollars and is depicted in Figure 6.6.

Proposed arms sales and services for Saudi Arabia increased dramatically in 1981 to $15.35 billion. The reason for the large increase was proposal and subsequent sale of eight Boeing 707 aircraft for $2.4 billion, five E-3A AWACS aircraft, support equipment and contractor logistics for three years for $5.4 billion and the highly debated 101 conformal fuel tanks for the F-15 jet aircraft for $110 million. This



Source: Compiled by author from Senate Proceedings, October 1, 1977 to September 30, 1988.

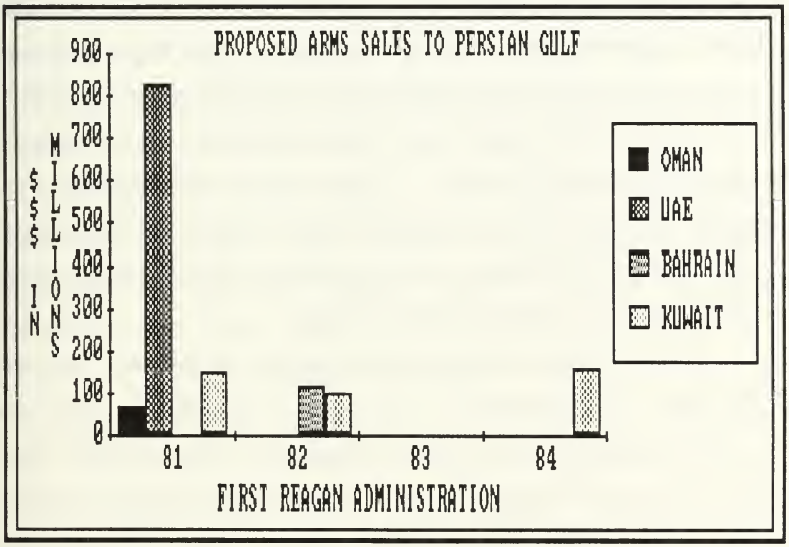
Figure 6.5 Proposed Arms Sales or Transfers to the Persian Gulf versus Saudi Arabia in the First Reagan Administration

package was worth $8.31 billion of the total proposals made in 1981. The remaining $7.44 billion of the 1981 proposed arms sales were divided between $4.86 billion for construction and $2.58 billion for military equipment. This is a ratio of two to one in favor of construction over military equipment proposals.

Following the huge increase in 1981, annual arms sales proposals were substantially lower throughout the rest of the first Reagan administration. After this one time drop in annual proposals the increasing trend resumed. By fiscal year

1984 the proposals had again increased to $3.224 billion. Referring to Table 4.2 shows that modernization and construction of the Saudi armed forces was the major thrust of the proposed sales and transfers.

Figure 6.6 shows the proposed arms sales or transfers to Oman, United Arab Emirates, Bahrain and Kuwait.



Source: Compiled by author from Senate Proceedings, October 1, 1977 to September 30, 1988

Figure 6.6 Proposed Arms Sales or Transfers to Oman, United Arab Emirates, Bahrain and Kuwait in the First Reagan Administration

Each of these Persian Gulf countries had marked increases but not of the magnitude of Saudi Arabia and cannot

be graphically compared against total proposed sales of the Persian Gulf.

Oman had one proposed arms sale of $62 million for fiscal year 1981. It was an additional sale of three C-130H logistic support aircraft. Yet, it was an increase of $22 million over the proposals in the Carter Administration.

The largest proposed arms sale outside Saudi Arabia was to United Arab Emirates in fiscal year 1981 for $828 million. Broken down into the individual 36b Notifications, $800 million was for the I-Hawk missile system and approximately 340 missiles, while the remaining $28 million was for TOW launchers and missiles. This substantial increase in proposed arms sales was to improve their self defense capability and was the first made to the United Arab Emirates since the AECA required the 36b Notification.

The proposed arms sales increase to Bahrain was for $114 million. The equipment was for six F-5 jet aircraft with only 60 Sidewinder air-to-air missiles. This was the first proposal made to Bahrain since the 36b Notification requirement had been effect and therefore was a definite increase.

The proposed arms sales or transfers to Kuwait during the first Reagan Administration occurred in fiscal years 1981, 1982, and 1984. As with other Persian Gulf countries the equipment was self defensive in nature consisting of I-Hawk launchers and missiles, and TOW launchers and missiles. This totaled to $407 million in the first Reagan Administration

vice a total of $188.9 million in the Carter Administration. This shows a definite increase.

Table 6.2 supports and holds Hypothesis 3 to be true.

The inroads made during the last eighteen months to re-gain strategic access in the Persian Gulf were carried on by the first Reagan Administration.

Beginning with the proposed sale of the AWACS early warning system to Saudi Arabia, the Reagan Administration set the tone for arms transfers as an integral part of United States foreign policy. The issue was the topic of many debates in Congress, but "arms for access" was the key to re-gaining influence in the Persian Gulf. Couple this determination with increased power projection of sending a carrier battle group inside the Persian Gulf and changing the Rules of Engagement for these ships, and the message became loud and clear. President Reagan intended for the United States military forces and arms sales to Persian Gulf countries to deter Soviet Union expansion plans for the Persian Gulf and protect neutral shipping of oil to Western Europe and Japan. The quantity and quality of all proposed arms sales or transfers promoted self defense of those countries. In addition it increased their regional and in some cases the absolute military capabilities.

The key to strategic access in the first Reagan Administration was the overt support of Saudi Arabia. Saudi Arabia's position as the Guardian of Islam is without question

the prime factor in any Persian Gulf policy that involves the rest of the Gulf Cooperation Council. Even though their actions are sometimes questioned by other Arab countries, the majority of them will go along with Saudi Arabia's decisions.

3. The Reagan Administration 1985-1988

Table 6.3 is a summation of the individual case studies:

TABLE 6.3

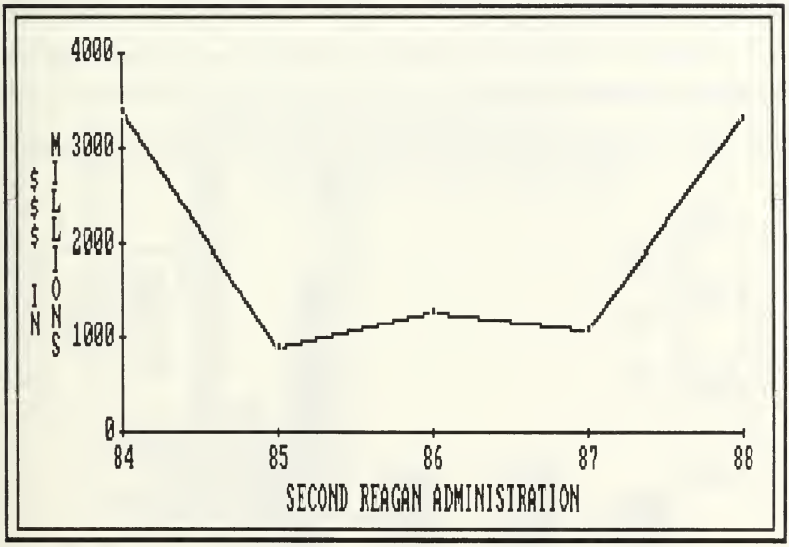
SECOND REAGAN ADMINISTRATION
PROPOSED ARMS SALES TO THE PERSIAN GULF
(FISCAL YEARS 1985-1988)

		SARABIA	OMAN	UAE	BAHRAIN	KUWAIT
US SOLE OR PRE-DOMINANT SUPPLIER		PRED	NO	NO	NO	PRED
INCREASE OR DECREASE IN 36b		INC	DEC	DEC	INC	INC
METHOD OF PAYMENT	CASH CREDIT GRANT	CASH	CRED	CASH	CASH	CASH
QUANTITY	NEGL SMALL MOD	HIGH	NEGL	NEGL	SML	HIGH
QUALITY	HIGH ABSOL REGION	HIGH HIGH	LOW LOW	LOW LOW	LOW MOD	MOD MOD
SUPPLY OIL US OR WEST*	SMALL MINOR MOD MAJ	US-SML WEST-MOD	NONE MOD	SML MOD	SML MIN	MIN MOD
STRATEGIC IMPORTANCE	LOW MOD	HIGH	HIGH	LOW	HIGH	HIGH

* Designation of WEST includes Western Europe and Japan.

The second Reagan Administration continued the proposed arms sales or transfers to the same five Persian Gulf countries. Table 6.3 shows an increase of arms proposals for Saudi Arabia, Bahrain and Kuwait, and a decrease for Oman and the United Arab Emirates.

Figure 6.7 correlates this increase in proposed arms sales or transfers and holds Hypothesis 2 to be true.



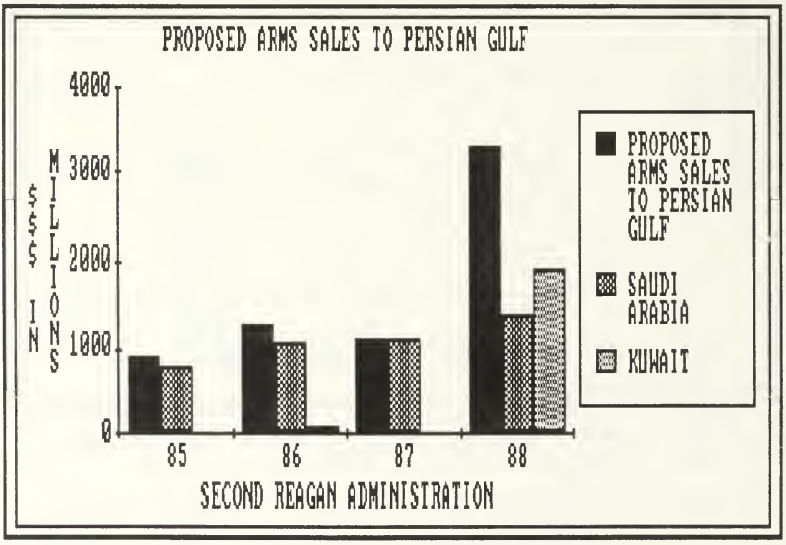
Source: Compiled by author from Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 6.7 Proposed Arms Sales or Transfers to the Persian Gulf in the Second Reagan Administration

Figure 6.7 shows an immediate decrease in proposed arms sales to the Persian Gulf between the first and second Reagan Administrations.

This looks like an excessive decrease for the second administration but it does not hold through the entire second term. The slight increase from fiscal year 1985 to 1986 and culminating with the dramatic increase in 1988 shows that there was an increase in proposed arms sales or transfers.

Figure 6.8 shows that proposed arms sales or services for Saudi Arabia decreased to $777 million in fiscal year 1985 but increased to $1.056 billion in fiscal year 1986 and has made slight increases each fiscal year since.

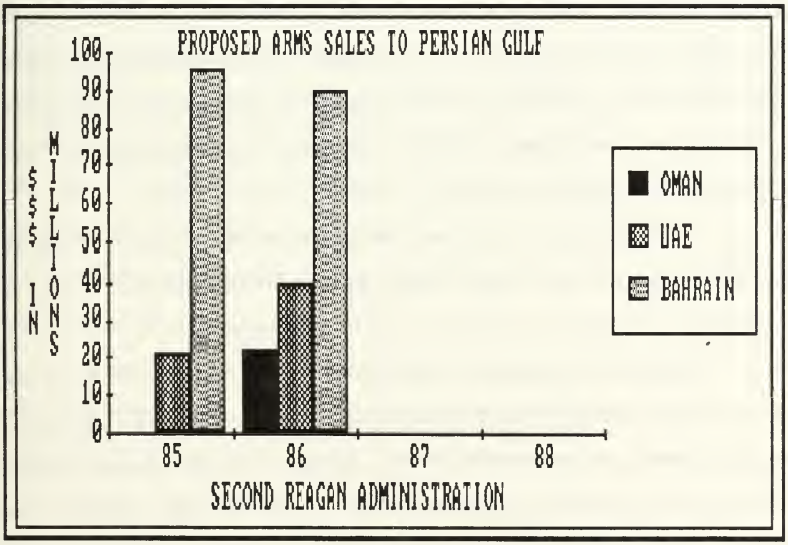


Source: Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 6.8 Proposed Arms Sales to the Persian Gulf versus Proposals to Saudi Arabia and Kuwait

Figure 6.8 shows that the proposed arms sales and services for Kuwait declined to $70 million in fiscal year 1986, but sharply increased to $1.9 billion in 1988. This increase was from a proposed arms sale of 40 F/A-18C Fighter aircraft. This was not only a substantial increase in arms proposals for Kuwait, but after it was approved, it made the United States the predominant supplier of military equipment and services for Kuwait.

Figure 6.9 shows increases and decrease of proposed arms sales or transfers for Oman, the United Arab Emirates and Bahrain in the second Reagan Administration.



Source: Senate Proceedings, October 1, 1977 to September 30, 1988.

Figure 6.9 Proposed Arms Sales for Oman, United Arab Emirates and Bahrain, 1985-1988

The proposals for these countries were not of the magnitude of those made to Saudi Arabia and Kuwait. Therefore they cannot be compared graphically to the total proposed arms sales or transfers in the Persian Gulf. However, the trends depicted in Figure 6.9 show that proposed sales decreased for Oman and the United Arab Emirates and increased for Bahrain.

Proposals valued at $22 million for Oman were for additional Sidewinder missiles needed to arm their British made fighter aircraft. They continued to received an annual cash payment from the United States for use of Al Masirah Island. As in all proposed arms sales to Oman, 36b Notifications were made with a guaranteed loan written in the proposal. The arms proposals for United Arab Emirates was almost a mirror image. Primarily the proposal ask for an additional 45 hawk missiles to go with the proposed and subsequent sale of I-Hawk launchers in 1981.

The proposed increase for Bahrain was for six F-5E jet aircraft with 15 additional engines and 54 M60 tanks. This is an increase from the past two administrations.

Table 6.3 supports and holds Hypothesis 3 to be true.

The second Reagan Administration simply followed up on the previous four years work to maintain the strategic access to the Persian Gulf. The concept of "arms for access" was working very well and by 1987, had an established enough creditability that Kuwait requested that 11 of their tankers

be re-flagged and protected during transits through the Persian Gulf.

Two events in 1988 prove that the use of "arms for access" worked in the Persian Gulf. First, there was a general cease-fire in Iran-Iraq War in August. The Islamic Republic of Iran had fought Iraq to a stalemate and could have possibly continued the war in the same fashion in which it had been fighting. The hidden factor in this war was that the entire Gulf Cooperation Council (GCC) had sided with Iraq and the United States presence was felt each time there was a confrontation with the U.S. Naval task force. The reason for the GCC support was that the United States had provided enough military equipment for these countries to defend themselves against any Iranian attempt to spread the Islamic Revolution. The dollar amount and type of modern equipment involved in these many arms sales proposals from the three presidential administrations, against Congressional scrutiny and debate, sent a clear message to Iran that there was nothing to gain from continuing the war.

Second, the Soviet Union began withdrawing their combat troops from Afghanistan in August 1988. Although the United States did not commit armed forces or a massive amount of military equipment to the Afghanistan rebels, there was support in the form of modern mobile weaponry provided to aid them in their struggle. The success of this type of equipment gave a lot of creditability to U.S. weapons that were being

proposed for sale to neighboring countries. The important point was that the Soviet Union's expansion past their borders was stopped.

B. ARMS SALES AND THE U.S. ECONOMY

The results of the independent and dependent variable questions support Hypothesis 4.

The two government studies of 1976, discussed in the independent variable question, were prepared at the beginning of an increased Congressional awareness of arms sales or transfers to third world countries. The first study was to make the point that a severe decrease or ban on foreign arms sales would have little or no impact on the United States economy in the long run.. The second study was conducted to point out the many cost savings that were realized as a result of a foreign military sales program and how foreign military sales were beneficial to the Department of Defense.

President Carter tried to reduce arms sales during his administration. He called for stricter controls and a worldwide reduction of arms sales or transfers to foreign countries in his Arms Transfer Policy Directive in May 1977. His plan was for the United States to be the role model for the rest of the world by reducing United States arms sales by 8% per year for four years. The plan was overcome by world-wide calamitous events. Both Congress and the Carter Administration learned that a total ban or even a sharp

curtailment of foreign military sales was not feasible during the late 1970's.

President Reagan encouraged arms sales to allies and friends as long as it promoted the interests of the United States. Again Congress and the Reagan Administration learned that during the first eight years of the 1980's that a sharp reduction in arms sales was not feasible.

Now that the Iran-Iraq War has subsided, the Soviet Union is withdrawing troops from Afghanistan and as of November, 1988, an agreement has been reached to pull Cuban troops out of Angola, the decade long debate concerning the Foreign Military Arms program will have renewed interest. These events prompted this study on the impact of a restraint on arms sales or transfers to Persian Gulf.

The trend analysis methodology for this subject was first used by Bajusz and Louscher in, Arms Sales and the U.S. Economy, 1988. The model and analytical procedures used by them was ideal for use in this thesis. Yet the format of their analysis utilized data which was not totally compatible with the author's goal of evaluating Foreign Military Sales effect on the economy as described by this thesis. Their study used available costs of selected combat aircraft and equipment such as tanks, fast attack naval vessels and selected aircraft weaponry in the Middle East. There was also insufficient uniformity of the cost data across various

equipment categories for the author's purpose (Bajusz and Louscher, p. 130).

This study uses 36b Congressional Notification data. Since Congress has yet to turn down an Executive Branch request in the form of a 36b Notification, the use of the data as a forecast tool is feasible. The proposed arms sales data in the 36b Notification includes the price of the equipment, the type and amount of military equipment that is being proposed for sale, and to whom the equipment is going to. Most importantly, it is not limited by selected combat equipment. The 36b Congressional Notification includes all types and grades military equipment, construction and design services, training and supply support contracts.

The trend analysis in this study gave rise to two conclusions. First, in order to determine the economic impact of a restraint in the Foreign Military Sales program, a demand for military equipment and services must be established. The results of the study projected a annual low demand of $1.89 billion and a annual high demand of $8.14 billion from Persian Gulf countries.

Second an economic impact of the loss in United States income and employment was projected from the anticipated demand forecast by the model. When direct and indirect income considerations are combined, the study reveals an annual loss ranging from $3.7 billion to $15.9 billion from foreign military sales to Persian Gulf countries. In turn, this loss

in income equates to a direct and indirect employment annual loss ranging from 81,250 man-years to 348,750 man-years.

The analysis presented thus far in this thesis are not the only economic impacts that will be felt if there is a restraint in foreign military sales. In a national economic sense, whenever there is a loss of income or employment, the amount of tax revenue that can be collected for the United States Government's use will also decline. Using a tax multiplier of .25 this study estimates that a loss from $0.93 billion to a $3.98 billion is a possible.

This study points out some of the economic consequences that could be expected whenever restraints are imposed in the Foreign Military Sales program. These repercussions are examined by specifically focusing on prospective United States arms sales or transfers to the Persian Gulf.

C. RECOMMENDATIONS FOR FURTHER STUDY

A further useful analysis for strategic access would be to take into account the military sales or transfers that are below the monetary threshold established by the AECA. These sales include commercial sales and those by the government that fall below the established thresholds.

A further useful analysis for projecting the demand of military sales would be to include the commercial sales that do not fall within the threshold of the 36b Congressional Notification. For example, the estimate for commercial sales

in 1976 was $0.6 billion whereas the estimate in 1988 was $2.0 billion.

Studies of the economic impacts of lost income or employment opportunities could be researched in the individual state and local community level. In particular where military industry is the major employer.

Further study of the impact on the corporate and individual tax structure not only at the federal level but at the state and local level as well.

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